

1 10 20 30 40  
QUERY A N G E V M S G C H W G V F K A R V E N G R A V A F E P W D K D P A P S H Q L D 40  
UniRef90\_M1F8G0 T K E I L T S G C H W G V F K G T V V E N G R A V K F F I P W E G D D P A S S H Q L D P  
UniRef90\_UPI00016A6E59 T R E I L T G S H W G A F R A T V V E N G R L V T D V K P W E G D D P A S S H Q L D P  
UniRef90\_A0A011P634 T I I T T A A H W G A L N V I T V E N G R V V K S E G Y L P K N H Q N E L L Q D P  
UniRef90\_Q7VHL6 D G E V I T G A H W G V L K A K I K E D G K V I S S T N A L K N N V S N E N L L H S T  
UniRef90\_M4R9F6 S K T V M T A A H W G P L F G V V V E D G K A V K S G P A M P M S L E N E N L L Q T A  
UniRef90\_L0MH18 A Q K G I L T G A H W G A F E A I V Q D G K M V G V Q P V K D D P Y P N E L L I A  
UniRef90\_C5ALG0 D R T V L S A C H W G I F R A R V R N G R F D R I T P W E G D D P H P T P M L Q  
UniRef90\_B9KDY6 N G S V I T A A H W G I L K L T L K D G V V V K S E P W E K A T Q L D N P L Q S  
UniRef90\_E7H0D2 D G E V L T A S H W G L F Y A K T K D G R L V A V R P F E G D R A P S P N L S  
UniRef90\_M8AIF1 N S F K T H S S H W G A F S G R L E N G R L E I E P H P G D D P H P S P L L G  
UniRef90\_Q6LS20 T G N V L S G S H W G A F R A K V V D G V V V D T V P F E K D L H P S P M I N  
UniRef90\_UPI0004000F92 S S S H Y G A V M A V V E G D K M V G I T P Y A S D L D P S P I L N  
UniRef90\_W71PV9 A T H W G S F V A V V D S G R L V R L E P R D D D P A P S P I G P  
UniRef90\_D6DP24 S T K T I L T A A H W G P M L V E T D G D T V L S S R G A L P S R H L N S L Q T  
UniRef90\_C6AN27 M T G S H W G A I R A K V E N G C V D V K P F E L D S K Y P T E M I N  
UniRef90\_B9D3R1 N K K V F G A N R F G P F W V N L N S S Q I V S V S E F E G D K F P N T M N Y  
UniRef90\_Q7M863 M S A S H F G A F R A S V K N S R F E G V I P F E E D A Y P T S M L Q  
UniRef90\_D4E287 A H W G A T A V V E D G R L I R C E P F A G D P D P S P M L D  
UniRef90\_M5F713 S R T L L T T M H W G T Y E V S A E N G K L V G T E P W S G D D P D P S P I G R  
UniRef90\_R7C0S5 T A S H W G L V F H P Q V A D G R L T G L T P Y A G D Y A P S P N L A  
UniRef90\_A3K4Z0 T S S H W G A F E V D V E N D R I V A T R P F S G D T H P S R I P D  
UniRef90\_A8I2H2 H A S H W G S F S A R W D G D R V Q L T P H P E D D P A S P I L G  
UniRef90\_C1DG74 T S L H W G A Y R P L V E N G R L V E M R P V P W D R D P P I G A  
UniRef90\_C6RED8 L L C A N K F G A F Y V K T I E G G R V V G T E P F E G D A M P T V L N N  
UniRef90\_G5S313 I L L T G S H W G A I R A T V V D G R F V A A K P F E Q D K Y P S K M I A  
UniRef90\_Q47T39 T S A H W G T F E L V R D G R V V G V R P D P A D P A P S P L I D E  
UniRef90\_B8IXP8 H S S H W G V F S A R M I D G E L E V R P Y E G D P D P N Q I E  
UniRef90\_F8KTB6 D G K V V S A A H W G M L I E L T I K E G R I I K S E P L E K V T Q M D N P L Q  
UniRef90\_L0IWD6 T K R T A T A T H W G A F Y T V L S D N G R V V S L E P T P E D S A P S P I G S  
UniRef90\_UPI0002EA24E1 A H W G A F T A I V Q D G R L I R C E P F A A D P C P S P L L D  
UniRef90\_A6FCL9 I P H A S H Y G A F K A V V K D G K L I G V Q T L S E D A M P T K M L T  
UniRef90\_U4VWWW6 V M H S A H W G F F A E R S G D Q L L G I E P F G G D P D P S P L L Q  
UniRef90\_Q21BK3 D G R V L V N T S I G P M F L V K S G G K V V G V E Q L K Q D G E P W K L G  
UniRef90\_J3DW88 L T A T H W G N Y F I H S D E N G A I I V D P V P N D S E P S P I G Q  
UniRef90\_UPI000378066B S G S H W G A F R A R V Y A G G E V Q E I K A F E A D K Y P T E M L N E  
UniRef90\_R11I48 S G S H W G A F R A R I V G G E V A E V V A F S H D K H P T E M L E  
UniRef90\_Q0S1F3 S H W G M F E A E V A D G D V V A A H P Y T G D A N P S P V L G R  
UniRef90\_UPI0002378936 S H W G S F T A A T P E G L D V V A D P G D P D P A P S P L L R  
UniRef90\_UPI000345ECFD H W G T Y R V R T A N G Q L T G M D P V E W D R N P S A I G Q  
UniRef90\_UPI000465E30C L T V T H W G T Y R V T I D N G V L N A V I E P V E W D R N P S K I G F  
UniRef90\_Q50569 T S I C P Y C G C G C L N V V T I D G K V E G V E P W K R H P L N E A T F V C  
UniRef90\_Q0B8S8 A T R S I V Q T A S H W G V Y N V L T D D G A I T G M T P F A A D R H P A T F V G  
UniRef90\_UPI0003650AF3 T R T V R T L T H W G A Y R L D I D G E T V T A V H P W P D D P D P S P V G E  
UniRef90\_A3CUC8 T T C P Y C G V G C L L V V N E G K L V G V E P L K R S P L N E G K L C  
UniRef90\_A4TCP1 H S A H W G A F S A T V E S G D L A S V R P W S G D A D P S P A L G  
UniRef90\_T1XLC0 H S A H W G V F S A A W D G H T L A V K P H P G D D P D P N P L I D G  
UniRef90\_L8DPU0 A D K T V C P Y C G V G C L T A Y H V K D N T L L R A V E G R L G P A N H G R L C  
UniRef90\_A6GL11 L T L T H W G A Y R M R H V P G G A T E A L P F E N D P D P S S L G R  
UniRef90\_Q5U9M0 H T V C P Y C G C G C I D L R T V K D D K I V G T H P F K R H P V N E G K T C  
UniRef90\_A6UJU1 C G G K C R A H I K D G K A I R I S T R P D A E L N C V R G R  
UniRef90\_I0DXJ1 C P Y C G M G C F Y I K T L N G Q P I G I E P Y P G G V N E G K L C  
UniRef90\_B6YU84 T S T H W G G Y Q V E V A D G R V V G V R P D P R D P A P S P M M A  
UniRef90\_UPI0003723EA0 G S H W G F Y S H H D D A Q D A V R P F A G D P D P V D F G T  
UniRef90\_H4FBT1 S V C P F C G V G C I T Y K V R D N R I V G V D G R D G P A N H G R L C  
UniRef90\_F5XWM5 K T T C P Y C G T G C G V E A T P S G K L V R V A G D P Q H P T N A G R L C  
UniRef90\_I8T8J0 T R S T C C Y C G V G C L I E S E G D R I T G V Q G D P E H P A N F G K L C  
UniRef90\_UPI0003473D2E T T C P Y C G C F N L V S V N G K L K G V E P W K R N P V N E G K L C  
UniRef90\_K2RWB5 K S T C C Y C G V G C L I E T E D G Q I V G V R G D P D H P A N L G R L C  
UniRef90\_A0A011Q7D9 S V C P F C G V G C L I T Y N V K D E I V S V E G R D G P A N H G R L C  
UniRef90\_D6CKF7 T V N C G S R C P L R M H V V D G E I K Y V E T D N T G D D N C L R G R  
UniRef90\_P18775 T K A T C P Y C G V G C G V L I E H D G R I T G V A G D P E H P A N F G R L C  
UniRef90\_Q5P7E5 T V N C G S R C P L R M H V A D G E I K Y V E T D N D D F A C L R G R  
UniRef90\_Q9X6B6 S V C P F C G V G C T E V H V A D D K I L K I D G R D G P A N E K R L C  
UniRef90\_UPI00036ACD0D A S T C C Y C G V G C G V L I E H D G E K I L G V K G D P N H P A N F G K L C  
UniRef90\_UPI00046ABAE1 A S T C C Y C G V G C G V L I E H D D E R I I G V K G D P A H P A N Y G R L C  
UniRef90\_UPI0003AA4AAF T K T T C P Y C G V G C V L V I Q Q D D N G L F S V K P D K E H P A N L G R L C  
UniRef90\_I3BU76 T K T T C P Y C G V G C I L A D V S D G K V G I R G D P T H P A N F G R L C  
UniRef90\_D8JV94 K G V C R Y C G V G C V L A G V S K G K L V A V K G D P E N T V N K G R L C  
UniRef90\_T0K2G7 A T R T T C P Y C G V G C G V L J A T P D G K G A A L A G D P D H P A N F G R L C  
UniRef90\_I0GC96 T R T T C P Y C G V G C V I S Y H V A G E K I V F A E G R D G P A N A G R L C  
UniRef90\_N6Y268 C I I K A H V K D G V V V R V S T D K A D D L S C V R G R  
UniRef90\_NOAZ17 R T V C P Y C G V G C V I L Y H V E K D R I I V K V R G D T A H P A N G R L C  
UniRef90\_R118E8 S V C P Y C G V G C C L T Y H V E R N G D E R I V K V E T G D P E H P V T R N G R L C  
UniRef90\_UPI00022607A8 N G V V P A V C G S L D C C L L H K E R E G R I V K V E T G D P E H P V T R N G R L C  
UniRef90\_UPI000381ABCB T T C P Y C G V G C V E A R I R D D R L I A V S G D T T H P A N N G R L C  
UniRef90\_UPI00035C7D51 T V C P Y C G V G C I N L V E N D K V G A E G A N G R T N E G Q L C  
UniRef90\_A0KL58 A T R T T C G Y C G V G C L D V V T S D G E V T A V L P A R D G P V N Q G K G R  
UniRef90\_L1KT98 T R S T C C Y C G V G C V L I E S E S G R I T G V R G D P E H P A N F G R L C  
UniRef90\_U1ANQ4 M L V E T D G E T V F S S R G A L A T G M E N S L Q S  
UniRef90\_H4I2Q2 S I C P F C G V G C T S L K V K D N K V K Y V E G I N G P A N E G R L C  
UniRef90\_A9DXY1 T K S T C P Y C G V G C V I I E S Q G A Q I T G V R G D P T H P A N F G R L C  
UniRef90\_J0K5Z1 T V N C G S R C P L R M H V A D G E I K Y V E T D N D D F A C L R G R  
UniRef90\_N6XCB6 S D G V F R S V C S L D C L L V H K K D G K I V K I E G D P S H P V T Q G A L C  
UniRef90\_UPI000378A0E2 T E T T C G Y C S V G C F E V Y G K D D E F L G V R P T D A E H A P N C V K G K  
UniRef90\_W0JVE1 S V C S Y C T G C I C L E T D G Q R I J S L R G N P K H P A T H G K L C  
UniRef90\_UPI000367A3E5 A D K R V W G A C C S V C A L R F H V Q D D V I R W V E T D N T G D D A C L R G R  
UniRef90\_C6C7U9 T R S T C P Y C G V G C V I E T R A H A I T G V R G D P E H P A N F G R L C  
UniRef90\_UPI00036A03F4 C G G K C I R A H V D R G V V T R I T T L P D G E L A C L R G R  
UniRef90\_H5V2C7 H T V C S H C S A V L V S V D A G G R A Q K I A G D P S H A V I T R G F L C  
UniRef90\_UPI0003681363



QUERY UniRef90\_M1F8G0 UniRef90\_UPI00016A6E59 UniRef90\_A0A011P634 UniRef90\_Q7VHL6 UniRef90\_M4R9F6 UniRef90\_L0MH18 UniRef90\_C5ALG0 UniRef90\_B9KDY6 UniRef90\_E7H0D2 UniRef90\_M8AIF1 UniRef90\_Q6LS20 UniRef90\_UPI0004000F92 UniRef90\_W71PV9 UniRef90\_D6DP24 UniRef90\_C6AN27 UniRef90\_B9D3R1 UniRef90\_Q7M863 UniRef90\_D4E287 UniRef90\_M5F713 UniRef90\_R7C0S5 UniRef90\_A3K4Z0 UniRef90\_A8I2H2 UniRef90\_C1DG74 UniRef90\_C6RED8 UniRef90\_G5S313 UniRef90\_Q47T39 UniRef90\_B8IXP8 UniRef90\_F8KTB6 UniRef90\_L0IWD6 UniRef90\_UPI0002EA24E1 UniRef90\_A6FCL9 UniRef90\_U4VWWW6 UniRef90\_Q21BK3 UniRef90\_J3DW88 UniRef90\_UPI000378066B UniRef90\_R11I48 UniRef90\_Q0S1F3 UniRef90\_UPI0002378936 UniRef90\_UPI000345ECFD UniRef90\_UPI000465E30C UniRef90\_Q50569 UniRef90\_Q0B8S8 UniRef90\_UPI0003650AF3 UniRef90\_A3CUC8 UniRef90\_A4TCP1 UniRef90\_T1XLC0 UniRef90\_L8DPU0 UniRef90\_A6GL11 UniRef90\_Q5U9M0 UniRef90\_A6UJU1 UniRef90\_I0DXJ1 UniRef90\_B6YU84 UniRef90\_UPI0003723EA0 UniRef90\_H4FBT1 UniRef90\_F5XWM5 UniRef90\_I8T8J0 UniRef90\_UPI0003473D2E UniRef90\_K2RWB5 UniRef90\_A0A011Q7D9 UniRef90\_D6CKF7 UniRef90\_P18775 UniRef90\_Q5P7E5 UniRef90\_Q9X6B6 UniRef90\_UPI00036ACD0D UniRef90\_UPI00046ABAE1 UniRef90\_UPI0003AA4AAF UniRef90\_I3BU76 UniRef90\_D8JV94 UniRef90\_T0K2G7 UniRef90\_I0GC96 UniRef90\_N6Y268 UniRef90\_NOAZI7 UniRef90\_R118E8 UniRef90\_UPI00022607A8 UniRef90\_C4KAJ6 UniRef90\_UPI000381ABCB UniRef90\_UPI00035C7D51 UniRef90\_A0KL58 UniRef90\_L1KT98 UniRef90\_U1ANQ4 UniRef90\_H4I2Q2 UniRef90\_A9DX1 UniRef90\_J0K5Z1 UniRef90\_N6XCB6 UniRef90\_UPI000378A0E2 UniRef90\_W0JVE1 UniRef90\_UPI000367A3E5 UniRef90\_C6C7U9 UniRef90\_UPI00036A03F4 UniRef90\_H5V2C7 UniRef90\_UPI0003681363

90 100 110 120

V T W D E A L I D L V A R E E L K R V Q E G P T G T F G G S Y G W K S P G R L H  
V S W E K A I L E L V A G E E L I T R V V R G S E Y Q Q A G I F G G S Y G W K S P P G G R L H  
V S W D R A F E L V S A G E E L I K R R V R Q Q K Y G S A S E S G S I F A G G S Y G W Q Y S C G G K V L H  
V S Y D E A I L E L I A K E E I L K A T Y K Q Q K G K S E S G I V F A G G S Y G W K S S S G G N L H  
V S W D K A I F E L V A G E E I V K R R L V T Q D D H H G A S Q S I F A G G S Y G W Y S V G G M L H  
V S W E R A I A L E L V A G E E L D R R T V R K H H G N T A I Y F A G G S Y G W K S S T G G K L H  
V S Y D E A I K L L A K E E L K R K T R D E T Y G P T Q A S A V F W G R S Y G W K S S T G S N M Q  
V S W D K A L D L V A G E E L L R R V Y D D H G P S A V F G G S Y G W S S A G R F H  
V S W A E A T K L V A D E E L L R R V Q N S N Y G P P E A L Y A G G S H T G W G S A G R F H  
V P W S Q A L D F F Y H E E L R R V R S Q Y H G P P E A L Y A G G S Y G W A S A G R F H  
V S W D H A I T L V S D E E L R R V R S Q Y H G P P E A L Y F G G S Y G W R S A G R F H  
V S W D D A L A L L H Y T E E H K E R I R D Q N Y G P P W A L F H T G N V G W R S T G G Q F H  
V T W D E V L D L A K A L K E N F D K Y G A E S A L Y G E C Y W W G S S G K V S N  
V S W D A L D L V A S E E L Q R R V R Y K S Y G A E S G L V F T G G S Y G W F C V G R L N  
V D W E L A L D L V A E E L D R V R V E H G N A S A V Y A G S Y G W A S A G R F H  
V P W E M A L D L V A A E A M T D R V Y R D N F G P P E A V F A K S Y G W M S P G K V N  
L P W D E T L D I A A A E E L D R I R K T H G N E A V F F G G S Y G W S S A G R F H  
V S W E T A L S L V A T E I A R R V R D S Y G P E A V F G G S Y G W S S A G R F H  
V D W D T A L D L V A A E L R V R G E Y G N S R A F Y G G S Y G W S S A G R F H  
V S W D E A I K L S A K I L K E N F D K Y G S Q A L L Y G Q L Y Q W G S T G K V G  
V S W D E A L D L F Y Q E L L E R V Q K T Y G P S A L L T A S G W Q S T G M F H  
V D W D T A L D L A A E L D R V R R D Y G N E A L F G G S Y G W A S A G R F H  
M A W Q E V L L L G R E L V R V R D G F G P E A L F G G S Y G W S S A G R F H  
V R Y D E A L K L I A H E L K K T R E S K G T N A I Y G G S Y G W K S S T G N M Q  
V P H D F A V D L V A A E E I E R V R R G T F G N A I Y A G S Y G W A S A G R F H  
V S W D T A L D L V A S E I G R V R R D T W G P S G I F G G S Y G W S S A G R F H  
V S W D V A L G L T A K A I L D T I D K A G N E G I F S S S Y G G W S H A G R F  
V S W E A S H R V A S E E L K R R V G E A Y G P A S L F G G S Y G W S S A G R F H  
V S W D D A L K I V S E E M Q R I K I Q T K F G N A S I H R G K S S W S N H A H F Y  
V S W D E A H E L V A E A T Q A A Q A K G N N S I Y G G S Y G W A S A G R F H  
V T W D E A I S L F Y H A E L E R M Q T Q Y G P W A L H A G S T G W R S T G Q F H  
V T W D Q A L D L F Y S E E L E R V Q K T Y G P S G V L A G Q T G W R Q T G Q Q F H  
V D W E E L T Q R L J A N E L R R V V D T H G N S A I Y G G S Y G W A S A G R F H  
V S W A E A V E L A A G E L D R V R R E C Y G N E A I Y G G S Y G W S S A G R F H  
V S W E Q A L T L V A G E L L A R V R C E Q N Q A I Y A G S Y G W S S A G R F H  
V S W E Q A L S L V A G E L L R E V K D T Y G N Q A I Y G G S Y G W S S A G R F H  
A S W D E A T S L I A S K E L E E Y R G E D P N D S L A F L S A R C T N E A G R F H  
V S W D D A L R L V A D E L L A R V K A E H G N E A I Y G G S Y G W A S A G R F H  
V S W E T A L D H V A R A L A R T R C E H H G N E A I Y G G S Y G W A S A G R F H  
A S W D E A Y D L I A S K F K T S E K Y G P K S A L Y G F Q V S C R T P N E E F Y  
V T W D D L V E L L G G E L R R V I D T H G N E A I Y G G S Y G W S S A G R F H  
M P W S E V L D L L A A G E L R R V K E R Y H G A G A V F Y G G S Y G W S S A G R F H  
V S W D E L T D V L S G E L S V V G H Y G N S A V L A G G S Y G W A S A G R F H  
A T W D E A L A L V A S K K L N H I K H A H G S N A L Y A G F G S A K C S N E E A Y  
V P W E L A V E L V S G E L T R V T K A F G S E A I F G G S Y G W S S A G R F H  
S S W E E V L S L I A S K L K K Y T P A D E V F F F S S A R C T N E D N Y  
I S W Q E A T S L I A A E W Q R I S D K Y G P A S R F V S L S T G V T G G F S  
I S W E Q A I K E J A E K L L E I R E K Y G P D T L G F F S S A R C S N E E N Y  
V S W S T A L D L L A A E L D R V R S R Y G N A A I Y G G S Y G W S S A G R F H  
V S W D E A L D L V A G E I R V R R D D H G N G A I Y F S G S Y G W S S A G R F H  
A T W E E A L D F A A G R L K A L R G T H H G P K S L A G F G S A K G T N E E A Y  
L S W D A A L D H A A G E L R R I V D T H H G P P S V A F Y V S G Q L L T E D Y Y  
V S W D V A L D T V A E R F A R V V E R H G P D A V A F Y V S G Q L L T E D Y Y  
A T W D E A L D F A A G K L K I R T H G P D S V A F Y V S G Q L L T E D Y Y  
I S W E E A Y D I I A T N M Q R L I K E Y G N E S I Y L N Y G T G T L G G T M T  
V G W D T A F A T A E R F A A T I R E Y H G P D S V A F Y V S G Q L L T E D Y Y  
I S W E A F E T I A G S M Q N I K E Y G N E A I Y L N Y G T G T L G G T M T  
A T W E E A L E R A A S G L S K I R D N K S P K A L A G F G S A K G S N E E A Y  
T D W D N A L E H A A N V F A E T I R E H H G P P D S V A F Y I S G Q L L T E D Y Y  
T D W D T A M G H A A Q V F G Q T I A E H H G P P D S V A F Y I S G Q L L T E D Y Y  
V S W D E A A Q T V A N R F R S E T I A E Y H G P D A V A F Y V S G Q L L T E D Y Y  
V S W D A A L R L V G S R F S E T I A E Y G P P D S V A F Y V S G Q L L T E D Y Y  
V S W D E A L D L I A T K F G E A V A Q F G P D S V G F Y V S G Q N I A E E A Y  
V A W S D A L D H V A H R M Q H I I A R D G A D A V A F Y L S G Q L L T E D Y Y  
A S W E E A L D F A A G L R R I K D A H G P H A L A G F G S A K G S N E E A Y  
I S W K E A V N T I A S E M K R I G D K Y G P E S R F D Y A T G Q C W G L H G  
V P W D D V L D R L A A E L D R V R T R H G N Q A I F G G S Y G W A S A G R F H  
V P M Q Q A I A T T A N R L R N I L D E T H H G P D A I A F Y V S G Q M S L E A Q Y  
A S W D E A L D F A A G L R R I L L D T H H G P G V L A G F G S A K C S N E A W  
I S W D E A I Q T I A E R W K A L V A E H H G S E S I L P Y S Y Y G N M G N I  
V S W D T A L D K V A S D T F A R L L D K H G P P D S V A F Y L S G Q L L T E D Y Y  
V S W D E A I E F A S S R L S A L K A K Y G P D A I M T T G S A R G P G N E A N  
V S W E E A L G H V A Q G L R K A I D A G G A D A V A A I S S A R A T N E E N Y  
V A W D E A L D A A A D R F A D I L R R H G P D A V A F Y A S G Q L L T E D Y Y  
V S W D E A L E L I H H Q H K R I R E A Y G P A S I F A G S Y G W R S N G V L H  
A S W E E A L D F A A K G L K G R G R E V A G F G S A K C A N E E A Y  
L T W D A A L G M A A S R F A D T I E Q H G P D A V A G F Y V S G Q L L T E D Y Y  
V G W D E A I A T A A N R F A E V I N T H G P D A V A F Y I S G Q L L T E D Y Y  
I S W D E A L A T I A G R W K R E L I A E Y G P P E S I M P Y S F Y G N M G R I  
A S W E E A L E R V V E E L S A I I D E D H G P D A L S C F A S S K C T N E E D Y Y  
V D W D K A L D Y G A E K F A N I I R E D H G P D A V A F Y V S G Q L L T E D Y Y  
I S W D E V L D D I A G S L K Q V V E K Y G N E S V Y I N Y S S G I V G G N I T  
L A W A A L D L A A D Q L G R I V H E H G P D A L G F Y L S G Q L L T E D Y Y  
I S W D E A T L L I A D N L K R I T A K Y G P A S R Y V H V L G T A V S G  
I F W D E A L D T I A E R L A A I A K Q H G P E S L P Y S Y A G T I G V L

QUERY UniRef90\_M1F8G0 UniRef90\_UPI00016A6E59 UniRef90\_A0A011P634 UniRef90\_Q7VHL6 UniRef90\_M4R9F6 UniRef90\_L0MH18 UniRef90\_C5ALG0 UniRef90\_B9KDY6 UniRef90\_E7H0D2 UniRef90\_M8AIF1 UniRef90\_Q6LS20 UniRef90\_UPI0004000F92 UniRef90\_W71PV9 UniRef90\_D6DP24 UniRef90\_C6AN27 UniRef90\_B9D3R1 UniRef90\_Q7M863 UniRef90\_D4E287 UniRef90\_M5F713 UniRef90\_R7C0S5 UniRef90\_A3K4Z0 UniRef90\_A8I2H2 UniRef90\_C1DG74 UniRef90\_C6RE88 UniRef90\_G5S313 UniRef90\_Q47T39 UniRef90\_B8IXP8 UniRef90\_F8KTB6 UniRef90\_L0IWD6 UniRef90\_UPI0002EA24E1 UniRef90\_A6FCL9 UniRef90\_U4VWWW6 UniRef90\_Q21BK3 UniRef90\_J3DW88 UniRef90\_UPI000378066B UniRef90\_R11I48 UniRef90\_Q0S1F3 UniRef90\_UPI0002378936 UniRef90\_UPI000345ECFD UniRef90\_UPI000465E30C UniRef90\_Q50569 UniRef90\_Q0B8S8 UniRef90\_UPI0003650AF3 UniRef90\_A3CUC8 UniRef90\_A4TCP1 UniRef90\_T1XLC0 UniRef90\_L8DPU0 UniRef90\_A6GL11 UniRef90\_Q5U9M0 UniRef90\_A6UJU1 UniRef90\_I0DXJ1 UniRef90\_B6YU84 UniRef90\_UPI0003723EA0 UniRef90\_H4FBT1 UniRef90\_F5XWM5 UniRef90\_I8T8J0 UniRef90\_UPI0003473D2E UniRef90\_K2RWB5 UniRef90\_A0A011Q7D9 UniRef90\_D6CKF7 UniRef90\_P18775 UniRef90\_Q5P7E5 UniRef90\_Q9X6B6 UniRef90\_UPI00036ACD0D UniRef90\_UPI00046ABAE1 UniRef90\_UPI00034AA4AF UniRef90\_I3BUT6 UniRef90\_D8JV94 UniRef90\_T0K2G7 UniRef90\_I0GC96 UniRef90\_N6Y268 UniRef90\_NOAZI7 UniRef90\_R118E8 UniRef90\_UPI00022607A8 UniRef90\_C4KAJ6 UniRef90\_UPI000381ABCB UniRef90\_UPI00035C7D51 UniRef90\_A0KL58 UniRef90\_L1KT98 UniRef90\_U1ANQ4 UniRef90\_H4I2Q2 UniRef90\_A9DX1 UniRef90\_J0K5Z1 UniRef90\_N6XCB6 UniRef90\_UPI000378A0E2 UniRef90\_W0JVE1 UniRef90\_UPI000367A3E5 UniRef90\_C6C7U9 UniRef90\_UPI00036A03F4 UniRef90\_H5V2C7 UniRef90\_UPI0003681363

130 140 150 160

N C Q V L M R R A L N L N L A G G F V N S S S G D Y S T A A A Q V I L P Y V V M G T L E  
N C Q T L L A R R T L N L N L T G S G Y F T S S S S G D Y S T G A A Q V I L P Y V V M G T L E  
P S R T L L S R R M L N V T V N T G G F V N S S R G D Y S T G A A Q V I L P Y V V M G T L E  
A S R T L L L Q R Y M T V N T G G F V N S S R G D Y S T G A A Q V I L P Y V V M G T L E  
N A R T L L L Q R F M G M A G G F V V G V S G D Y S T G A A Q V I M P Y V V L G G T L E  
N A S R T L L H R Y L M N L T G G F V V G V K G D L S T G A A Q V I M S H V V V G G S T L E  
N S R T L L Q R L M N L T G G F V L G Y A G D Y S T G A A Q V I M S H V V V G G S T L E  
S C R V L L W R M L K L Y G G F T S S L S N Y S D A A T S A V L P Y V V V G S A G  
N A C R L L L H R F L N S V L T G G F V G T T G D Y S T G A S Q V I M P Y V V V G G S T L E  
N A L A L M Q R L L S V L T G G F V V E T G N S Y S T A A S T I L P Y A V V G G K  
H A Q S Q T H R F L N V L G G Y V R S V N T Y S S G A A M V I I P H V V L G G P Y D  
S A G T M M M R A I G L H G T Y L G K M G D Y S T G A A Q V I L P Y V V A G A M E N  
N A P T L L R R M L G S T G G Y T A S V N N Y S F G A A Q V I L P H I I G G D F N  
N A Q G Q L Q R F L A L G G G Y T D S R N T Y S T A A L E V I L P H V I I G G H P  
K A A T L L Q R Y M S L A G G Y T H L G D Y S T G A A Q A I M P Y V V L G G S T E  
S C A G N H M L R A V Y S M H G H S V S T A G D Y S T G A G Q V I L P Y V V L G G S T E  
W G R T V A H R M L K V L G G Y T V E E S G D Y S T G A G L V I M P H V V L G G S A  
N P Q A L L G R M L G L A G G Y T S R T L G T Y S T H A L R A I L T P Y V V T G D E T  
H A R S L L V R F Y F S G G G V D Q L G N Y S W G A A Q F F L P Y V V I G T F T  
H A Q S Q V H R F L N T V G G Y T R S I L S Y S Y G A A E V I L P H V V L G G T D  
S A V T L V N R L C R L M G G F T E C V N S Y S T A A L S T I L P Y V V V G M  
H A Q S Q V H R F L N S I G G Y V A S F G S Y S T G C A Q S I M P H V F G L D F  
H A Q S Q I H R F H N V V C G G Y V R S V N S Y S A G A S T L P R V M G P F E P  
H A Q S Q L H R F L N G F G G Y V S S R D S Y S L G A G R V L L P H I I A G D M D  
H S Q R T A K R M L N A L G G Y V S E L G G Y S Y L G A A T A F L P H I I A G S L D  
N A S G M L A R A I A L H G N S V S T G G D Y S T G A A Q V I L P R V V V G S M E  
H A Q S Q L H R F L N T I G G Y T R S V A T Y S H G A A V E L P H I I V G H A L  
H A Q S Q I H R F L N T I G G Y T R S V T Y S S S G S Q V L I P H I I L G N H E  
N A R T A L Q R F L N L T G G V V G G L G D Y S T G A S Q V I M P Y V V M G S I E  
H A K S Q I H R F M G M A G G Y V D S V N T Y S W G A L E V I M P H V I I G T P M S  
H A R S L L R F H F G G G G C V D Q V G N Y S V G T A Q F L P H V I I G T D R  
R P N V L Q G R F F N M I G G C S L T S G D Y S G G A S Q I S L P H I I I G D M E  
H A Q S Q V H R F L N T T L G G Y T R S V N S Y S S G A A S V P H I I V G D M N S  
R T E A L L Q R F L N T F G G S V F F G N Y S N Q A I S E I L P A V A W S P  
H A Q S Q V H R F L R C C G G Y T D S V D T Y S Y A A E V I L P H I I A F Q A  
S C G N H M A R A M H G G Y T V N K K I G D Y S T G A G Q T I M P Y V V L G S T E  
S C T H M Q R A M A H G F F V K K I V G D Y S T G A G Q T I M P Y V V L G S T E  
H A Q S Q V H R F L N T I G G Y T R S V H S Y S L G A T G V I M P R V V V G T H W  
H A Q S Q V H R F L N V I G G Y T R S V N S Y S F G A S T P L P H I I V G S D D  
H A Q S Q L H R F F N C F G G Y S G S T N T Y S I A A G E R V L P H I I V G D L D  
H A Q S Q L H R F L N Q F G G Y T A S T N T Y S I A A G E R V L P H I I L G D L D  
L L Q K F A R A V I G T Q N V D H C A R L C H G P S V A G L A K T F  
H G P S V L K R L L G L H G G Y V D K R G N H S F G A A L G V M P Y I L G R S D  
H A Q S Q V H R F L A A T G G Y V S S V N T Y S F A A E V I T P Y V M G Y D F  
I M Q K L A R V A F K T N N I D N C A R L C H G P S V A G L S F  
H A Q S Q V H R F L N C L G G Y T Y S R H S Y S L G A T G V I M P R V V G T H D  
H A Q S Q V H R F L N T T L G G Y V R S V N S Y S L G A T G V I M P H I I S M E E  
H A Q S Q V H R F L N C L G G Y T R S V H S Y S L G A T G V I M P H V L G A H W  
L F Q K L V R T G F G T N N V D H C T R L C H A S S V A A L L E G V  
H A Q G Q L H R F L N C A G G Y T S S V N T Y S V A A G E V I L P H D P Q D M M  
I F Q K F S R A V M K T N N I D H C A R I U H S A T V A G L E A F  
G A N M L R R L F N L T G G F L E N Y H S V S N G N T M A A T P Y T Y  
L L Q K I A R L L G T N N V D H C A R L C H A S T V V I G L A Q T V  
H A Q S Q L H R F L N T I G G Y T R S R T T Y S H G A V E V L F P R I I G V P A  
H A Q S Q L K R F F N M N G G S V R S V Q T Y S Y A A G E V I L P H V I G S L D  
L F Q K L V R T G F G S N N V D H C T R L C H A S S V A A L L E G V  
V A N K L V K G F V G T A N I D T N S R L C M S S A V A G H K R A F  
V A N K L A K G L I G T N N I D T N S R L C M S S A V S A Y K M A L  
A F Q K F V R T V V G T N N V D H C A R L C H G P S V A G L A Q T F  
V F N K L A K G L I G T N N I D T N S R L C M S S A V A G Y K Q T L  
L F Q K L V R T G F G S N N V D H C T R L C H A S S V A A L L E G V  
R S W P P G N T L V A R L M N C C G G Y L N H Y G D Y S S A Q I A E G L N Y T Y  
V F N K L V K G L I G T N N I D S N S R L C M S S A V A A Y K Q T L  
R S W P P G A T L L A R L M N C C G G Y L N Q Y G D Y S T A Q I A A G L N Y T Y  
L F Q K L V R T G F G S N N V D H C T R L C H A S S V A A L L E G V  
A F N K L S R A L V G T N N I D S N S R L C M S S A V A A V V G Y K R S L  
A F N K L A R A L V A T N N I D S N S R L C M S S A V A A V V G Y K R S L  
V A N K L M K G F I G S A N I D T N S R L C M S S A V A A H K R A F  
V A N K L M K G F I G S A N I D T N S R L C M A S A V A G H K R A F  
V A N K L F K G A I G T N N I D G N P R T C M A S A V A G Y V S T F  
V A N K L M K G F V G T A N V D T N S R L C M S S A V A G H R R A F G A D T V P  
L F Q K L V R T G F G T H N V D H C T R L C H A S S V A A L L E G V  
G S T S V R K L L S L T G G Y L N Y R N D Y S S G A G N V A T P Y T Y  
H A Q S Q L H R F L N T I G G F T G S R N T Y S N G T S S V L L P H V V I G D M H  
L T N K L A K G F V R S Q N Y I E S N S R L C M A A G T G Y K L C L G A D A P P  
L F Q K L V R T G F G S N N V D H C T R L C H A S S V A A L M E C I G S G A V T  
T A E G M D R R F F N R L G A S L L D Q T I C N A A G A A G Y R Y T M  
V A N K L M K G F I G S A N V D T N S R L C M S S A V A G Q K R A F  
Y V M Q K F A R A V L G T N N V D H C A R V U H A P S V S G L E T T V  
L V Q K F M R V V I G T N N V D N C S R L C H S P S A A G L T A S F  
L F N K L A K G V A G T N N I D T N S R L C M S S A V A A Y K M A F  
K A S T L L Q R Y M A L A G G Y T H L G D Y S T G A A Q A I M P Y V V V G R E  
L F Q K L I R Q G F G H N N V D H C T R L C H A S S V A A L M E N V  
V F N K L A K G L I G T N N I D T N S R L C M S S A V A G Y K A T L  
V F N K A M K G L I G S N N V D T N S R L C M S S A V A A Y K Q T L  
G T E G M D R R F F N R L G A T E L J E Q T I C E A A G S E G Y K Y T M  
L M Q K F A R A V L G T N N I D N C A R L C H S S T V A A L K Q T V  
L F N K L M K G F I G S N N I D T N S R L C M S S A V A G Y K R A F  
R S S P S A S L V T R L M N C Y G G S L G Q Y T Y S T A Q I A Y A M P Y T Y  
V F N K L A K G L I G T N N I D T N S R L C M S S A V A G Y K A T L  
S G D K M V R R L L N T G Y L E Y H S V S M G N T A A T P Y T Y  
G Y G S M D R R F F H R L G A S Q L D R T I C A T A G G D A F L S V Y

QUERY UniRef90\_M1F8G0 UniRef90\_UPI00016A6E59 UniRef90\_A0A011P634 UniRef90\_Q7VHL6 UniRef90\_M4R9F6 UniRef90\_L0MH18 UniRef90\_C5ALG0 UniRef90\_B9KDY6 UniRef90\_E7H0D2 UniRef90\_M8AIF1 UniRef90\_Q6LS20 UniRef90\_UPI0004000F92 UniRef90\_W71PV9 UniRef90\_D6DP24 UniRef90\_C6AN27 UniRef90\_B9D3R1 UniRef90\_Q7M863 UniRef90\_D4E287 UniRef90\_M5F713 UniRef90\_R7C0S5 UniRef90\_A3K4Z0 UniRef90\_A8I2H2 UniRef90\_C1DG74 UniRef90\_C6RED8 UniRef90\_G5S313 UniRef90\_Q47T39 UniRef90\_B8IXP8 UniRef90\_F8KTB6 UniRef90\_L0IWD6 UniRef90\_UPI0002EA24E1 UniRef90\_A6FCL9 UniRef90\_U4VWWW6 UniRef90\_Q21BK3 UniRef90\_J3DW88 UniRef90\_UPI000378066B UniRef90\_R11I48 UniRef90\_Q0S1F3 UniRef90\_UPI0002378936 UniRef90\_UPI000345ECFD UniRef90\_UPI000465E30C UniRef90\_Q50569 UniRef90\_Q0B8S8 UniRef90\_UPI0003650AF3 UniRef90\_A3CUC8 UniRef90\_A4TCP1 UniRef90\_T1XLC0 UniRef90\_L8DPU0 UniRef90\_A6GL11 UniRef90\_Q5U9M0 UniRef90\_A6UJU1 UniRef90\_I0DXJ1 UniRef90\_B6YU84 UniRef90\_UPI0003723EA0 UniRef90\_H4FBT1 UniRef90\_F5XWM5 UniRef90\_I8T8J0 UniRef90\_UPI0003473D2E UniRef90\_K2RWB5 UniRef90\_A0A011Q7D9 UniRef90\_D6CKF7 UniRef90\_P18775 UniRef90\_Q5P7E5 UniRef90\_Q9X6B6 UniRef90\_UPI00036ACD0D UniRef90\_UPI00046ABAE1 UniRef90\_UPI00034A4AAF UniRef90\_I3BUT6 UniRef90\_D8JV94 UniRef90\_T0K2G7 UniRef90\_I0GC96 UniRef90\_N6Y268 UniRef90\_N0AZI7 UniRef90\_R118E8 UniRef90\_UPI00022607A8 UniRef90\_C4KAJ6 UniRef90\_UPI000381ABCB UniRef90\_UPI00035C7D51 UniRef90\_A0KL58 UniRef90\_L1KT98 UniRef90\_U1ANQ4 UniRef90\_H4I2Q2 UniRef90\_A9DX1 UniRef90\_J0K5Z1 UniRef90\_N6XCB6 UniRef90\_UPI000378A0E2 UniRef90\_W0JVE1 UniRef90\_UPI000367A3E5 UniRef90\_C6C7U9 UniRef90\_UPI00036A03F4 UniRef90\_H5V2C7 UniRef90\_UPI0003681363

170 180 190 200

V Y E Q Q T A W P V V V V E N T D L M V F W A D P M K T N E I G W V I P D H G A  
V Y E Q Q T T Y P V L A E H T D L M V F W G C D P R N N S H I S W Q V A D H G A  
V Y E Q Q T V W P V V I V E H T D L M V F W G A N P V I S T N Q I G W L V P D H A A  
V Y A Q P T S W H T I V E S T Q L L V I W S A N P L N T L R I A W T S A E P E G  
V Y E Q Q T S F S S V L D N S Q L V V I W G A N P M A T L R N A W T L N E G T G  
V Y E Q Q T S W E V V L E S S E I V V F W A A N P L L T L R N A W T S T D H Y G  
V Y E Q Q T A W P N V V E H S Q L V I W G C N P M V T L K N S W N V P D H Y G  
V V D Q Q T T W P V I A K H T Q V L V L W G C N P F N T C Q I G W L V P D H N Y  
V Y E Q Q T S W E N I L E N S K N V I W G A N P I A T L R I A W T A T D Q R G  
V L F K P T A W P V I K E K T E R I V F W G C D P L I T N D I D W A T T L H Q G  
S F D R K S V T W D A I E R S S E L V L A G M A I K N A D V H G G G I S T H T V  
V Y E Q Q T S W P L V L E N S D T I V I W G S D P P K N L Q V G W L V P D H S P  
R I L V E T T D W R S I D G R L V V A F G G M P P R N S Q I A S G G T G K H T Q  
W S Y Q S R M P M W I A E H C E L V V A F G G L A L K N S Q I N P G G L A K H Q  
V Y Q Q Q T S W P L V L E H A E S E N I V F W S A N P L N T L K I A W N A S D E Q G  
V Y S Q Q T S W E V I L K E S E N I V F W A S D P V K N L Q V G W N C E T H E A  
V Y D T P T K W K A V V K N A K N V V F W G T D P I V T N Q I S S V P P T H D G  
S S N Q Q T A Y P N V I A N S E C I V F W S A D P I N T N Q I A W G V P D H Q S  
P L T G R V T S W P V I K E H C D I F L A F G G L A N A Q V S S G G A E H A L  
G L T G N H S T W D G I V R H S E L I V F G G L P W R N A Q I S G G G T G H E A  
P D P K V K S W D S V L A N A K C V V F W G A D P L I T C D I D W T T L H E A  
L S L L Y Q H E G W H S I H D H V M F G G I N P K N A Q V S M G G V T D H D T  
L S R H N V T W D Q I C A H T D M V L A F G G M P I K N S M I A S G G I T R H V  
W L L A R H T S W D N L A E H C Q L F V A G L P L K N A Q V S P G G A S D H L L  
P T H A P T R W E G V L K E A K T I V F W G T N P V V S N K I A I G V P M H N S  
V Y E Q Q T S W P L V L Q N S K T I V L W G S D M V K N Q Q A N W W C P D H D V  
L Y R A P T W E T I A E H T D L V S F G G L R V S N T W V A S G G R A A H T A  
E L A K H N V T W E Q V E K D S E I V I F G G M A L K N S M V A G G G I S K H V  
V Y E Q Q T S W E N I L Q H S K C V V I W G A D P L A T L R I A Y T A S D Q R G  
I S T R G P T Y A E I A A E G E L V V S F G G L A R K N A A I C Q G G I G D H V  
P L T G R V T A W P S L I A N T E V F L A F G G L A N G Q V S S G G A E H T Q  
V Y S P Q T A W E Q V R D N T Q V F C M I G C D P F K N N R I E Y R V A D H Q M  
V A R R G V S W E I L A G H S E L V L A F G G L A L K N A Q V A S G G L S E H T  
A A A T D W P V I H Q N A K L V I W G C N P V A T R I L S G R Y A T H A  
G M E V S T T E E V I A A H C K R I V Y F G G A A T R N M Q V N P G G T G Q H D A  
V Y A Q Q T S W P L I L D N S K T I V L W G N D L V K N L Q V G W N C E T H E S  
V Y A Q Q T S W Q L V L K N A K Q V I W A N D P V K N A Q V G W C C P H D V  
K M F A R S T S W K I J A E H T M V C F G G V P L K N T G V N H G G T S D H P T  
P I S R P T A W P V L A E H T E H F V C F G G I P A K N S Q V N S G G I S H A V  
T L Q R Q H T H W S V L A E H C E F V A G L P L R N A Q V N G S G G A N D H G L  
D L Q R Q H T H W S V L A E H C E F V A I G G L P L R N A Q V N G S G G A N D H A L  
G S G A M T N S I D I E E S S C I F L I G S N A E Q H P L T  
I T N L V P S W P D I E S T G L V M F G G A M N T Q L D A G G A V I H D S  
N T F R A A S T S L S V E T E L L V C F G G V P W K N A Q M Q S G G I G R H V V  
G S G A A T N P F E D V L N A D I V F M I G A N T I E A H P L  
D L F T R S T Q W Q V I N T D T M V C F G G L A L K N T A V N D G G T T A H P A  
V A R R N V T W E Q I V A H T D V V L A F G G M A L K N S R V A S G G I S R H V  
K M F S R S T S W N V I A A H T E L L V A G V P V K N T G I N H G G T S D H P T  
G S G A V S N P V M D V Q A E V I F V I G A N P T V N H P V G A T W  
Y N G M Q P S W K D M A E N A E L V V A F G G M S M K N R Q V G A G G P R H L A  
G S G A M T N S I D I E E A N C I F I I G S N T F E Q H P I I  
G T A A S G S T L D T L E N T P L V I L W G H N P N E T I F G H S  
G A A A Q S G S Y T D I P K A K V L L I W G Y N P S E T H P V L M  
A D R L L H R A P S W E R I R E H T E L L G L R V S N T W I A S G G R A A Q T A  
G L V S G Q T P W S Q I V G H A E L I V M G T P L R N A R V N A G G V V R H E T  
G S G A V S N P V A D V A Q A E L V I V I G S N P T A N H P V A A T W  
G E D T V P V A Y E D L D R C D L V L V L G S N T A W C H P I L F  
G A D G P T C Y E D L E A R T V L F A G S N M A W A H P V L F R R L E A A  
G S G A M T N S L E S C A H A D V V F L I G T N T L E Q H P L M W  
G A D A P P C C Y E D I P L A N C L L I A G A N P A I A H P I V F R R I E D A  
G S G A V S N Q V N D V E H A E L I L V I G S N P T A N H P V A A T W  
G G W A D G N S P S D I E N S K L V L V F G N N P G E T R M S G G G V T  
G A D A P P C C S Y E D F A Q T D C L L I A G A N P S Y A H P V A F R R I E D A  
G G W A D G N S P S D I E N S K L V L V F G N N P A E T R M S G G G V T  
G S G A V S A P F T S V A D S D C I I I I G C R P G W N H P V A  
G A D A P P C C N Y E D I E Q S D C L L I A G S N M A Y A H P V L F R R L E E A  
G A D S P P C C S Y E D I E Q S D C L L I V G S N M A Y A H P V L F R R L E Q A  
G E D L V P C C S Y E D L E Q A E L I V L V G S N A A W C H P V L Y Q R M V K A  
G S D T V P G C Y E D L E A D L I V L V G S N A A W C H P V L Y Q R I V A A  
G E D E P M G A Y A D I E Q A N V F F I I G A N M A E A H P V L Y S R L V D  
G  
G S G A V S N P V R D V E F A S D L A I V I G A N P A A N H P V  
G D N S G S S F D T L L H S K Y I I L W G Q N P G E M V Y S T P Y  
A V L R Q A S T W P T I E H T E L I V A F G G V P E K N V F V T P G G V T V H G  
G S Y E D F D C T D L F F V I G A N M A D C H P I L  
A S F M Q A A H A D V V I L T G C N P T V N H P V A A T Y  
G G S Y G T D P E T M D Q T K L F I M W G I N T V S T N M H Q  
G S D T V P A C Y D D L Q E A D F V L L V G S N A A W A H P I L Y Q R L V R A  
G N G A M S N A I P E I Q E T K C L L V F G Y N A A D S H P I  
G L S G G T S F D D V E R S D C L L V V G A N P V I E A H P V  
G A D G P T C Y E D L E S A G C V L F A G S N M A Y A H P V L F R R L E D A  
V Y Q Q Q T S W P L V L E S S D V V V L W S A N P L N T L K I A W N A S D E Q G  
G S G A V T A T F N E I G N A D V A I V I G A N P V I E N H P V A A T Y F K Q F T  
G A D A P P A C Y D D V K H A Q C L E F V G S N A A W A H P I L F R R I E D A  
G A D A P P C A Y E D F H A D C I L I A G A N P A Y A H P V A F R R I E D A  
G G S F G T D P E D T V H A K L I V M W G I N A V S T N M H Q  
G Y G A M T N R I D V I A N T D C S F F I I T G S N T T G S H P V L A T  
G A D G P T C Y A D I E L A E S F F I I G A N P A Y A H P I L F R R M E A A  
G S N M G N S T S D I E N S K L V V M F G N N P A E T R M S G G G I T  
G A D A P P A S Y A D F H A D C L E I A G S N T A W A H P I A F R R I E D A  
G T P A T G S S L D T L A D T P L V I L W G H N T N E T I F G H S  
G R K L G T D T E Q F H R A R L I I A W G A N I H G N S V H L

QUERY UniRef90\_M1F8G0 UniRef90\_UPI00016A6E59 UniRef90\_A0A011P634 UniRef90\_Q7VHL6 UniRef90\_M4R9F6 UniRef90\_L0MH18 UniRef90\_C5ALG0 UniRef90\_B9KDY6 UniRef90\_E7H0D2 UniRef90\_M8AIF1 UniRef90\_Q6LS20 UniRef90\_UPI0004000F92 UniRef90\_W71PV9 UniRef90\_D6DP24 UniRef90\_C6AN27 UniRef90\_B9D3R1 UniRef90\_Q7M863 UniRef90\_D4E287 UniRef90\_M5F713 UniRef90\_R7C0S5 UniRef90\_A3K4Z0 UniRef90\_A8I2H2 UniRef90\_C1DG74 UniRef90\_C6RED8 UniRef90\_G5S313 UniRef90\_Q47T39 UniRef90\_B8IXP8 UniRef90\_F8KTB6 UniRef90\_L0IWD6 UniRef90\_UPI0002EA24E1 UniRef90\_A6FCL9 UniRef90\_U4VWWW6 UniRef90\_Q21BK3 UniRef90\_J3DW88 UniRef90\_UPI000378066B UniRef90\_R1148 UniRef90\_Q0S1F3 UniRef90\_UPI0002378936 UniRef90\_UPI000345ECFD UniRef90\_UPI000465E30C UniRef90\_Q50569 UniRef90\_Q0B8S8 UniRef90\_UPI0003650AF3 UniRef90\_A3CUC8 UniRef90\_A4TCP1 UniRef90\_T1XLC0 UniRef90\_L8DPU0 UniRef90\_A6GL11 UniRef90\_Q5U9M0 UniRef90\_A6UJU1 UniRef90\_I0DXJ1 UniRef90\_B6YU84 UniRef90\_UPI0003723EA0 UniRef90\_H4FBT1 UniRef90\_F5XWM5 UniRef90\_I8T8J0 UniRef90\_UPI0003473D2E UniRef90\_K2RWB5 UniRef90\_A0A011Q7D9 UniRef90\_D6CKF7 UniRef90\_P18775 UniRef90\_Q5P7E5 UniRef90\_Q9X6B6 UniRef90\_UPI00036ACD0D UniRef90\_UPI00046ABAE1 UniRef90\_UPI00034AA4AF UniRef90\_I3BU76 UniRef90\_D8JV94 UniRef90\_T0K2G7 UniRef90\_I0GC96 UniRef90\_N6Y268 UniRef90\_N0AZI7 UniRef90\_R118E8 UniRef90\_UPI00022607A8 UniRef90\_C4KAJ6 UniRef90\_UPI000381ABCB UniRef90\_UPI00035C7D51 UniRef90\_A0KL58 UniRef90\_L1KT98 UniRef90\_U1ANQ4 UniRef90\_H4I2Q2 UniRef90\_A9DX1 UniRef90\_J0K5Z1 UniRef90\_N6XC6B UniRef90\_UPI000378A0E2 UniRef90\_W0JVE1 UniRef90\_UPI000367A3E5 UniRef90\_C6C7U9 UniRef90\_UPI00036A03F4 UniRef90\_H5V2C7 UniRef90\_UPI0003681363

Y A G M K A L K E K G T R V I C I N P 220 T E T A D Y F G A D V V S P R P P Q T D D  
F P G V E M L K K A K G V K T I S I N D P V V R S E T T E T A D Y F G A D V V S P R P P Q T D D  
Y P A M E A L L R R A K G G T R V I C I N D P V V R S E T T E T A D Y F G A D V V S P R P P Q T D D  
I D C L J A K I L R K A S G K R V I C I N D P V V R S E T T E T A D Y F G A D V V S P R P P Q T D D  
L D F F D Q L K K S G K H I I S I N D P V V R S E T T E T A D Y F G A D V V S P R P P Q T D D  
L E Y L K A L K E S G K R V I C I N D P V V R S E T T E T A D Y F G A D V V S P R P P Q T D D  
Q T G F A L K K K S G T R V I S I N D P V V R S E T T E T A D Y F G A D V V S P R P P Q T D D  
F D L I K T A K A A G I K V I C I N D P I R T E T S C K F L L D N A G E W L A P R P P Q T D D  
L Q Y F E K L K N S K I K V I C I N D P I R T E T A D Y F G A D V V S P R P P Q T D D  
L A E I R K K D H P R I R T L A V N P L R P K T A D V V L N G A R Q W M P V I R A P R P P Q T D D  
R Q K L A G A S A R G A H F T F V V S P L R S D D E F P A D A G A G E W L A P R P P Q T D D  
Y A Y Y Q K V K N A K E I K Q F V Y I G P V V R S D D E M A Q K F V G G E Q I A V P R P P Q T D D  
R D W N R R A R E A G V F V Y I G P V V R S D D E M A Q K F V G G E Q I A V P R P P Q T D D  
T R D L Q R R C R S A G V E F V N I S P L R S D D E T A D F L D A E W L A P V V P N T D D  
V S Y F D A L R K S G K R V I C I N D P M R S E T T Q L D F F G D E W L A P H M G T D D  
Y A Y L E A L K K A I A N V I S V D P V V K T K T H Y F L N C N G Q Y I N P N T D D  
Y V I G M Q E L K K A G I K T Y S V N V M I N D T A R Y Y G S E N I I V N R P P T T D D  
Y A Y M M E A K K R G L K F Y C I N D P V Y N N T A S Y F G A T H I K I I R P P T T D D  
K P W L E K L V R K G T P V I N V S P M R D D C P A S F V G N A E W L A L R P P N S D D  
S A A L R K A V G N G A R L I N V S P V R K T D D A P R G F V D T E W L A L R P P N S D D  
A H L R R L K E S G R T I A I N P L R K T K T A G E F L G S D W L A P R P P Q G T D D  
A S W M Q R C L A K G M Y C I N V G P Q R S D A P E G C D W L P V I R P P G S D D  
A D A M A R A A A R G T E F W S V S P L R D D D M P E A A E A R W L P R P P G T D D  
R E A L D R L S R A G V R F V N L S P L R S D D L Q G A A D C E W W P L R P P G S D D  
Y A Y M K E K F K G E M K I Y V D V Y R N E T A E Y F G A Q Y I A V R P P C T D D  
Y Q Y L K E K V A S G A I S V I S I D P T H D Y L G R D K V K H I A I N P Q T D D  
E G G M R E A A R R G T E F V S I S P L R S D D A A E E L A R P E W W S A V I P P G T D D  
E R V M Q R A A A R G C E F I L V S P L R S D D L P E A E L A R P E W W S L I P P A S D D  
I A Y F E K L K A S K T K V V C I N D P V Y T D T A D Q F L D A Q W V A P R P P N S D D  
V P A L R K D R C R A G V R F V N V S P V R D D S D D A L G A D W L P I I R P P N S D D  
E G W L R K L A A S G A T V I N I S P P T R D D C P A F L L G A E W I P I R P P N T D D  
Y P R W E A I K D K G I K F V S I N P Q F T I T D E A L D C E W V K I I P G T D D  
E R F M Q R A A A Q R G T R F I S V S P L K S D L P E E A Q G G E W L A L R P P N T D D  
W Y E A A K R G I E I A I V D P M R S E S V K E L G C E W L P I R P P N T D D  
R S H F N A I A E A G I D V V N V S P M R D D V A G N L N A E W L Q C P P N S D D  
F E Y L E Q L K E K I A K V I S V D P V V T K T Q Q D Y L N S E Q Q Y I N P Q T D D  
Y G Y F D Q L K D K I A N V I S V D P V V S K T Q K F L G C E H Q Y I N P Q T D D  
R D A L D A L R R R G G S V V S F S P L R D D D V H G A A E R H A P V I P P G T D D  
A G H L R R A R E R G A R F T L I S P L R D D D L A P E L G A R W L A P V P P G T D D  
N D W L Q R A M S R G V R F I N I S P V K N D D L S A I P L Q A Q W L A I R P P G T D D  
D H W L Q T L R A N G C R F I N I S P V R N D L A A V R D A E W L A I Q P P G S D D  
W R R V L R A K A N G A K L I V A D P R V S P T A K M A D I Y L P F K P G T D D  
V D W Y A R A G E Q P F I V I S P S R A D V P A G P R A E W L P I R P P H T D D  
G P A L Q A A A A R G C R L I N L S P L R D D D L A L J A G A V W Q P V R P P N T D D  
G R R L V Q A K K A G K K I V C F S P R Y T P T A R L A D E W V A R Y N P S T N D D  
R D A L N R L R A R G G R I V S F S P L R D D V D G P C D W H A P V P P G T D D  
E R S M R E A A A R G C R F V C I S P L R S D D L P D E A Q F E W L A A R P P N T D D  
A G S L D A M R T R G G K T V T V S P L R N D D M A G D A R W I A P R P P G S D D  
I K N A V K N G A K L I V A D P P R R S D L A R H A T H F L Q F K A D S D D  
S S A V K S I S D A G V R F V N V S F T R D D A P L D K M T H F A V R P P C T D D  
A R R L I R A K E N G T K V I V V D P R K T M T A Q S Q A D I F L Q I T P T N D D  
N H Y F Q K M K K N G T R F I V V D P R Y S D T A S S L A D Q W I P I L P P G T D D  
R Y L L R A R D N G A K I V V D P R K T R T V W F A D M H L Q L K P P G T D D  
G P A M R A A S D A G V E F V S V S P L R D D T P D E L K C T W M S L E P P G T D D  
R Q G L V A C R D A G A E F V N I S P V R D D A G E D L G S E W M A L R P P G T D D  
M K N A A R Q G T R I V L A D P R I T E L G R H A W R T L Q F K P D T D D  
Q R M L R A R E A R P Q M K I V V L D P R K T A S T E M A D L H L G L R A G S D D  
R R V L Q A K E K G A K I V A D P R F T P S A K Q A D L Y I P F Q S G T D D  
R A A N P E L R I V I D P R R S E T A A L A D L H L A L R P P G T D D  
M K N A A K R G T K I V L A D P R V T D G R H A W R T L Q F R P P D T D D  
Y Y L E Q A R Q K S N A R M I I I D P R Y T D T G A G R E D E W I P I R P P G T D D  
K A A R P E M K I V V D P R R T D T A A T A D E L H L A I L P P G T D D  
Y Y L E Q A R E K S N A K M I V I D P R Y T D T A A G R E D E W I P L R P P G T D D  
T Y L K Q A A K D P N K H L F V M D P R G Q N L V R Y A D K H L Q F K P G R D D  
K S K R P E M K I V I D P R R T D T C E L A D L H L A I L P P G T D D  
K A D K P D M R I V V D P R R T D T C D I A D L H L A V Q P P G T D D  
K K Y N P L L K V V N I D P R R T Q T A D L A D L H L G L A P P G T D D  
K D K R P E M K I V I D P R R T M T S D I V D L H L Q I K P P D G D D  
R K N S N P N V K I V V D P R R T R T A D I A D I F L Q F V P P G T D D  
Q R M L R N R Q E R G A R M I V I D P R R T D T A G D V D L F L G L K P P G T D D  
A S F M K N A A E R G V K L V M M D P R E T P L A R H A W R F L Q F H P D A D D  
R E Y L L Q A A K N G A K I V V I D P R Y T D T A T Y A D E W I P I L P P T T D D  
T P G H L A R L R A R V A L V S P L R D D L P S T V D A R W Y P V R P A T D D  
F L R L M D R K R S G A R L I V V D P R R T A T A E K A D L Y L P I R P P G T D D  
F K Q A A K R G R T R I V L D P R G L V L G H H A H R M V R F T P P G S D D  
V S I A E Q A R K Q G A K V V I D V H K N Q T G R W A D W F V P I Q P P G T D D  
K Q A R P Q M Q V V L D P R R T A T C D L A D R H L A L K P P G S D D  
A R H I L K A K A N G A K V I V C D P R M V E T A R I J A D Q W L P L K N G S N  
G A R L L R R V L R G A K L V V A D P R A V G L A L H A D V H L R P P P G T N  
R R D W P D A R W I V V D P R R T D T A A M A D L H L Q I Q P P G T D D  
L S Y F S A L R D S G K K L I C I N D P M R S E T I D F F G M E W V A P H M G T D D  
K R S G K L I V M D P R G V G L R R F A S H M L Q F R P P G T D D  
R A A N P A M K V I V A D P R R T D T A G M A D L F L P I Q P P G S D D  
R K A R P H M K L I V V D P R R T D T A A S A D L H L A I L P P G T D D  
V A I A E K A R K N G A T V V A I D V H R N R T A R W A D W F I P I R P P G T D D  
R I K Q N V R G A D L I V F D P R K I D I A E H A D Q Y T R V E P P G Y D D  
K E A N P K L K L V A D P R R T D T C S I A D L Y L P L K P P G T D D  
Y Y L E Q A R A R S N A R M V V I D P R Y T D T A A G R E D E W I P I R P P G T D D  
K R A R P G L K L V V V D P R R T D T V E L A D L H L A I L Q P P G T D D  
N H Y F Q K M K R N G T R F I V I D P R Y S D T V S S L A D Q W I P I L P P T T D D  
W P Q I E E A R R A G A R L I V I D P Y Q T R T A K L A D W H I A I H P P G T D D

QUERY UniRef90\_M1F8G0 UniRef90\_UPI00016A6E59 UniRef90\_A0A011P634 UniRef90\_Q7VHL6 UniRef90\_M4R9F6 UniRef90\_L0MH18 UniRef90\_C5ALG0 UniRef90\_B9KDY6 UniRef90\_E7H0D2 UniRef90\_M8AIF1 UniRef90\_Q6LS20 UniRef90\_UPI0004000F92 UniRef90\_W71PV9 UniRef90\_D6DP24 UniRef90\_C6AN27 UniRef90\_B9D3R1 UniRef90\_Q7M863 UniRef90\_D4E287 UniRef90\_M5F713 UniRef90\_R7C0S5 UniRef90\_A3K4Z0 UniRef90\_A8I2H2 UniRef90\_C1DG74 UniRef90\_C6RED8 UniRef90\_G5S313 UniRef90\_Q47T39 UniRef90\_B8IXP8 UniRef90\_F8KTB6 UniRef90\_L0IWD6 UniRef90\_UPI0002EA24E1 UniRef90\_A6FCL9 UniRef90\_U4VWWW6 UniRef90\_Q21BK3 UniRef90\_J3DW88 UniRef90\_UPI000378066B UniRef90\_R1148 UniRef90\_Q0S1F3 UniRef90\_UPI0002378936 UniRef90\_UPI000345ECFD UniRef90\_UPI000465E30C UniRef90\_Q50569 UniRef90\_Q0B8S8 UniRef90\_UPI0003650AF3 UniRef90\_A3CUC8 UniRef90\_A4TCP1 UniRef90\_T1XLC0 UniRef90\_L8DPU0 UniRef90\_A6GL11 UniRef90\_Q5U9M0 UniRef90\_A6UJU1 UniRef90\_I0DXJ1 UniRef90\_B6YU84 UniRef90\_UPI0003723EA0 UniRef90\_H4FBT1 UniRef90\_F5XWM5 UniRef90\_I8T8J0 UniRef90\_UPI0003473D2E UniRef90\_K2RWB5 UniRef90\_A0A011Q7D9 UniRef90\_D6CKF7 UniRef90\_P18775 UniRef90\_Q5P7E5 UniRef90\_Q9X6B6 UniRef90\_UPI00036ACD0D UniRef90\_UPI00046ABAE1 UniRef90\_UPI00034A4AAF UniRef90\_I3BUT6 UniRef90\_D8JV94 UniRef90\_T0K2G7 UniRef90\_I0GC96 UniRef90\_N6Y268 UniRef90\_N0AZI7 UniRef90\_R118E8 UniRef90\_UPI00022607A8 UniRef90\_C4KAJ6 UniRef90\_UPI000381ABCB UniRef90\_UPI00035C7D51 UniRef90\_A0KL58 UniRef90\_L1KT98 UniRef90\_U1ANQ4 UniRef90\_H4I2Q2 UniRef90\_A9DX1 UniRef90\_J0K521 UniRef90\_N6XCB6 UniRef90\_UPI000378A0E2 UniRef90\_W0JVE1 UniRef90\_UPI000367A3E5 UniRef90\_C6C7U9 UniRef90\_UPI00036A03F4 UniRef90\_H5V2C7 UniRef90\_UPI0003681363

250 260 270 280

V A L M L G M A H T L Y S E D L H H K D F L E N Y C T T G F D F A A Y L T G E S  
V A M M M G I A H T L L S E E N R L H H D Q D F L D E R Y V T S G F F E E F F K P Y L L T T G E S  
V A M M L G I A H T L L Y R E N R L H H D K A F L D E R Y T T V G F F E E D R Q F F S P Y Y L L T T G G K S T  
V A L M L G I A H T L R E N R L H H D K A F L L E K N Y T T V G F F E E Q F F K S D S Y L L L G G K T A E  
V A L M M G I A H T L V T T E K K H H D K A F L L Q N T Y T T K G F F E E Q F F A S Y L L L G G K E D D  
G A M L L G I A H T L T T E K L H H D A F L L K N Y T T V G F F D A F F L A Y L L L T G G R T E  
V A M M L G I A H T L Y S E K L H H D E A F L L K R Y T T V G F F D A F F L A Y L L L T G G R T E  
V A M M I G M A S H L T A K N K V L N Y A F L E N Y C V T S G F D K F K A Y I L D G G K T E E  
A A L M L G M M Y V I T E N G W H H D R A F L E N Y C V T S G F W N E M E A Y I L L G G T E E  
V A M M L G L A H V L V T E N G L H H D R T F L E R Y T T V G Y D R K F F E N Y L L L G G R E S  
L P L M L A I A H T L Y T E N G L Y N K D F L A D R Y T T V G F K K R F V P Y Y L L T G G Q A  
A A L M L G L A H T L V A E N G L Y D R G F I L R R Y T T S G F D R F F A A D Y L L T G G Q A  
T A A M L G I A H T M L V N G W H H D E D F L R R Y C C V G F D R F F A A Y L L V G G E L  
V A M M L G I A H T V E N G W H H D E F L A R C C V T T G F D K F F A A D Y L L T G G Q T E  
V P F M L A L A Y E L V T K D L Y D K K F L E Y T T V G F E K F F V P Y L L T G G T E  
T A L T I G M C H Y L F T N N L Y D E E F I K K Y T V G F N K F K D Y F L L G T E Q  
V A M M L G M A H H I L Y T E N G A Q D K E F V L A R C C V S G F E E F F R A Y L L L R G G V T  
V A L M L A L G Y E I Q R H G A Q D E A F L A R C C V S G F E E F F R A Y L L L R G G V T  
T A L T L A L C H H T I S E G R A H D E A F L A R C C V T G F E T L V R A Y I M G G E S T  
T A L M L A L H E L I T T E G R A D T G F L A R C C V T G F E T L V R A Y I M G G E S T  
T A L M L A L A Y V L E T S E G L T T H A F L D R Y T E G F A R F P Y L L T G G E A  
V A M M L G L A H T L L T E A L Y D S S F V L A R Y C V G F E R F F A S Y L L T G G E A  
T A M L A L A Y V L V D E N G L H H D Q A F L A R Y T V G F P F F R D Y L L L G V V  
T A M L I G L C A D Y L Y S E K L Y D K E F L E R Y T V G F D K F K E Y F T G G A K  
V P L Q L A L A H T L Y S E K L Y D K N F L D N Y C V G F D Q F L P Y L L L G G K A  
T A I L L S L I F T L V A E D R V L D T A F L E R Y T V G W P H L R R D Y V L L G G K R A  
T A L M M A M V I T L V E E G R H H D R A F L E R Y T V G W P T F E R Y L L L G G K A  
V A L M L G M A S H L V A I K K V D Y K F L E T Y T T G F D R F F A Y L L L G G K E S  
V A L M L G L A Y E I V V S D H H D K D F L N R C C V G F E A F A D Y L L L G G R S  
V A L M L A L A Y E L L R A S G A H H D M A F L N Q D C C C S G W P E L E A Y L L T G G Q R  
T A L F L S M C H Y L Y K N D L H H D E K Y L D K Y T V G F E K F L P S Y L L L G G K D  
A A F L G L L A V L T T E N G L T D D E A F L A R Y C V G F P Q M V E A Y L L R G G E K  
V A L A L G L M H T L T E N L Q D K A F I D A R Y T K G F K D F F E Y I L T G A K  
V A L M L G L M H T L T E N L Q D K A F I D K Y C V G F D V F S D Y V L M G I G  
V P F M L A I A H T L Y T K E E D L Y D K K F E T Y A L G F F L P Y L L L G G E T  
V P F M L A L A H T L Y T K E E D L Y D K E F I K Y C L G F E P F I L D Y V L M G K T  
V A I M L A L A F V L A T E D L H H D T A F L G S H C V G Y D R F E D Y L L G G R S  
T A L M L A L S H V L V T E N G W H H D E F L R T H H C A G F D E Y F W A Y L L S G G K A  
T A L M L A I G Y L L V T E N L Y A D R E F V A R H H T V G F A Q Y S A Y L L L G G E Q  
T A L L L A V C Q V L I A E E R L V N Q D F I A R C C V T G Y D R F A A Y L L L R G G E D  
V P L M N A M M N V I V E E G L H H D R E F I S R Y T C D F E K L K A E T Y L K N Y K D  
T A L M L G I A H T L V E E G L Y D R D F L A R Y T T G F F E P F R C T L L M G E A  
L A L N S I M Y W I Q E S L A H H D R E F L E K R T T G F E D L K K Y L L E N Y A D  
V A I M L A L A H V L A T E S L A D R E F L A R C C D G W A T F F E R Y L L M G R S  
T A L M L A L V H Q I V S D G A H H D R E F L A R C C D G W A T F F E R Y L L M G R S  
V A M M L A L A Y V L A D E K L H H D T A F L D T Q R T E G F D E F F E R Y L L G I S  
V A L N A L H V I A D E N L I N Q E F I D D Q R T E G F D E F L P Y L L M G V S  
V P L M L A L A H T I I V E G L F D E Q F V A R C C V T G F D E F L P Y L L M G V S  
A A I L N G L N V I V K N N L D N Q A F I K N R T K G F A E L K K S V L T E K Y T  
N A M M D A M M Y V I V T E N L H H D Q A F I D K Y T L G F S E E Q M Y L L T G G K  
I V L A N A M M H V I I E E R L Y D R E F I M N R T K G F E K L I A V L Q K Y T  
T A V L L A L M Y V L F N E G L A D T A F L D R Y T V G A D R L R A Y L M G M G R N  
T A V L L A L A H T L I E T A K H H D E T F L E R Y T V G Y D R L R D Y L F G R N  
V A L L N A M I H T L I E E G L A D R E F I A Q R A S N F E A L K E S V A G F A  
V R L F N G L L A H L H R L G L T D A A F V E R S T L G L D E T L A A A  
V A L F N G M L H H I I W E G L I D R A Y I E R S H T E G F A A L K A M V R E Y T  
V A L L N S M M N V I I A E G L E D K E F V K N R T T G Y E E L K E M V K K Y P  
I A L Y N G L L N V L L G E Q L V D R D Y I A R H T E G F D E L E A I A A Y P  
V A L L N A M I H T V I E E G L V D Q E F V T Q R A S N F E A L K Q N I A O A Y S  
A A L V N G L A Y V M I T E N L V D Q A F L D K Y C V G Y H Y K A Y I L G E G P  
I W L Y N A M L N V L W E G Y V D N A F L R E Y H T E G F E A K A R D H V L R D V T  
A A L A S A L A Y V M I T E N L V D Q P F L D Q Y C V G Y H A Y L R D I L G Q G A  
V A M L N A M I Y T I I E E N L Y D L Q Y V Q A N T E G F E E L K A N I K D F S  
V A L F H G I L H L M W E G W I D R D Y I D D Q H T E G F D A L K K V L R D Y T  
V A L F H G I L H L M W E G W I D R R F I D D E H T G F D E L K T L V R D Y T  
A V L F N G L L N W L A E N G Y S A D G F V A Q S T Q G A N A L A A K Q S A  
V A L F S A L L S H L F E T D A I D D F I A A H T S G F T D A L R A  
L A L N S M A Y V I E E N L V D R N F I A N Q H T N F M G G E K K F D E F K T  
T A L F S G L F V H L A D N G A L D Q D Y I A Q N T S G F D D A L A R A R N I A  
V A L L L S M A C T I T E E G L T P D F I A A R T E G F D E A F R D A A L K Y T  
N A L M D A M G Y V I T E K L H H D Q A F L D K Y C V G F D E G H M Y L L G E K  
T A L M L A L A H T L V V E G L H H D R E F L A R Y C V G F P E F E R Y L L R D K D  
L A L N G L L H V I V K G N D A I D R D F I A A R A T T G W D V M E A F L E D Y A  
V A L F N A M L N V I V G E N L T D R D F I A A R T E G F D E A L A H V A P L T  
T M L A L G I M H L L F A E G L T D D A F L A A Y T V G V E E L R A H V K T Y T  
A F L F N G L L S Y L A Q E D A L D H T Y I A A Y H C E G F D A A L A Q A Q R K C  
M A L V N A F A N V L I N E E G L Y N K E F V A N Y T E G F D T F K A T V A K Y T  
V A L F H G L A H V L L T E G L V D E E F L R E R V T G L P E L A E L L L D Y P  
V A L F H G M L H H I W E R L I D A G Y I A A H T E G F D A L K R M V L R D Y T  
V A L M L G I A H T L V E N G W H H D E A F L A R C C T T G Y A V F A S Y L L L G E S  
V S M L N A I M H V I V E E G L Y D A Q Y I A A Y T E N W E A E K A H L E D F S  
V M L F N G M L H L M L R E G W V D A A Y I A A H T S G F D A L K A L V A D D C  
I W L Y N A M L H L L R E G L V D A A F I A A H T E G F D A L R T H V V A D T I T  
A A L A L G M M H V L F A E G M E N E A F L R E Y T V G H E E L R A H V R Q Y D  
V A W I N G L T R Y I V W N D L H H D E A F I E E H T K H F D E L Q E K L E P F T  
V P L Q A M L N V M V W E G L I D R D F I A Q H C G F D A M A S I H A M T  
A A L V A G L A H V L I T E N L V D Q A F L D T Y C V G Y H Y K A Y I L G Q G A  
V M L F H G M L H I M L W E G W N P A Y I A A H T S G F D A T Q A V V R D C  
N A L M D A M M Y V I T E N L H H D K A F I A E R Y T L G F D E T M M Y L T G A K  
A A L A L G M M H V I F A E G L E D R A Y I D Q H T I G A K E L A R A G E Y T

QUERY D G T P K T A E W A A E I C C G G V L P A E Q L R E L A R S F V A G R T M L A A G W S 290 300 310 320  
UniRef90\_M1F8G0 D G Q P K D A D W A A E I C C G G V L P A E Q L R E L A R R R F F A S N R R T M L A L G Y A  
UniRef90\_UPI00016A6E59 D N R V P K D A D W A S Q I C C C G G I P A E T T I K E L L A H A F V A N R R T M L A A G W S  
UniRef90\_A0A011P634 D N Q P K T A E W A S Q I C C C G G I S A E T T I K E S L L A Q L F F A N R R T M L M S G W G  
UniRef90\_Q7VHL6 D G I A K D A L W A S K I C C G G I V S A E Q T I E S L L A Q L F F A N R R T M L M S G W G  
UniRef90\_M4R9F6 D N Q P K D A A W A A N I T T G V V E A E A L R Q L L A R D F F S A K N R R T M L M G G W G  
UniRef90\_L0MH18 D G I A K T A D W A A N D I C C G G V E A E A L R Q L L A R D F F S A K N R R T M L M G G W G  
UniRef90\_C5ALG0 D G T P K T P E W A A E I C C G G I E P A K L R E L L A R T F A T D H R T M L A L G W S  
UniRef90\_B9KDY6 D G V K K D V K W A S K I C C C G G I D E K T I K T F A E S F Y D N P T M I M S G W G  
UniRef90\_E7H0D2 D G V K K T P E W A S I G C C G G V D E A Q Q I Q S F A R E L S E H R S M I M F G W G  
UniRef90\_M8AIF1 D G Q H K S P E W A A A I C C C N I A P E T T I R K L A R R M A G S G R T L I T V S H S  
UniRef90\_Q6LS20 D G V E K T P E W A A K I C C C G I K A D E T I R A L L A R R M A S G R T Q I T G W C  
UniRef90\_UPI0004000F92 D G T A K D A D W A A A I S G S L K A D E T I R G L L A R R M A S G R T M I S L S W S  
UniRef90\_W71PV9 D G V R K D A A W A A G I T T G V I S R E A I T D L A R R L T D R R S L I V V N Y A  
UniRef90\_D6DP24 D G I A K T A E W A A A I C C G G I D A A E R I R E L A T L F H S R V T M L M S G W G  
UniRef90\_C6AN27 D K V A K T P E W A A A I C C G G I S A E R I R E F A T Q M L A G K R R T Q L I F G W S  
UniRef90\_B9D3R1 D K V V K D I E W A S K I C C G G V E P A G T I A Q F A T H L A K E P T T V L L I G R A  
UniRef90\_Q7M863 D K V A K T P E W A A A I C C G G V E S S L I K A G L A K E F V K K R R M L M G G W G  
UniRef90\_D4E287 D G V A K T P Q W A S A I T T G I P A E R I A G L A Q Q L I G V R S F I T C S Y S  
UniRef90\_M5F713 D G Q P K D P A W A A S L T T G M A E D R M V J A L A R E M A A K R T M V M V S W S  
UniRef90\_R7C0S5 D G T A K T A E W A E K I C C G V I Q A R V I R E L A R R M A Q N R T M L M M G W G  
UniRef90\_A3K4Z0 D G T P K T P E W A A P L I C G A E P D T I R D L A R R M A R T R T L I T V A W S  
UniRef90\_A8I2H2 D G L P K S A D W A A E I T T G I G A D A M R M L A R R L V E G R S L I T V A H S  
UniRef90\_C1DG74 D G Q P K D P E W A A A R T D I P A P R I V E I R A R R M A A G R T M I N V A Y A  
UniRef90\_C6RED8 D G V K K D L K W A S K I C C G V I S E K E L K N L A D T L A K K D T L I V T Y S  
UniRef90\_G5S313 D G Q P K D A A W A E K L C C G I D A D E T I R A L L A R Q M A G D R T Q I I A G W C  
UniRef90\_Q47T39 D G V A K T P E W A A A L T S G I P A A E L R E L L A R R M A G G R T L I N V G W S  
UniRef90\_B8IXP8 D G I P K D A H W A A P L I T T G V P A D A I M A L A R R L H G K R A L V V S H S  
UniRef90\_F8KTB6 D G V K K D V A W A S Q I C G I K S S T I E K L A Q S F Y D Q P T M I M S G W A  
UniRef90\_L0IWD6 D G V Q K D A K W A S R L T E I P A E T T I R S L A T K T A T S R T V I N V S W S  
UniRef90\_UPI0002EA24E1 D G A P K T P A W A A A I T T G V P A E R I A H L A V Q L A G R S Y L T C S F A  
UniRef90\_A6FCL9 G S E E K T P K W A A K I T T G I P E A K I T E L A K M F A D N R T Q F A G S W S  
UniRef90\_U4VWWW6 D G V V R D A P W A A A I C G I S S D L I R Q F A R Q L H G K R V L V T V A H A  
UniRef90\_Q21BK3 D G T P K T A E W A S G L I T T G I P A E T T I R G L L A R K M A G T R T T I A G W S  
UniRef90\_J3DW88 D G Q P K D A E W A Q S K S E I D A E E I R K L A R L M A A E R C M I G L S F S  
UniRef90\_UPI000378066B D K V E K T P E W A E T I C C G I K A D D R I R E F A R S I V K E R T Q I M V G W S  
UniRef90\_R11I48 D K V E K T P E W A S K I C C G V D A D D R I R E F A R M L A S E R T Q L M F G W C  
UniRef90\_Q0S1F3 D G V P K S P A W A E Q I S G I A A D L V A L A R R M A A G R T M V T V T W S  
UniRef90\_UPI0002378936 D G V P K S P Q W A E E I C C G I D S A T I V G L A R S E V A T R R T M V N L S W S  
UniRef90\_UPI000345ECFD D G V A K T P A W A A A I T T G L P A A D I T A L T E S M A R H K R T M I N I A W S  
UniRef90\_UPI000465E30C D C E T K T P E W A A T I T G L P A D T I R Q L A R Q M A Q K K T M I N M A W S  
UniRef90\_Q50569 P E E A E K I T L T P A D K I R E A A I T T G I P A T I R E A Y A G A K N A V I Y C L G  
UniRef90\_Q0B8S8 G G T P R S P E W A A E I T T G I P A T R I R E L A R S M A A N R T L I N L S W S  
UniRef90\_UPI0003650AF3 D T P A R D A E W A A S V S G V P A A T I R E L A R E M A G S R T L I N L S W S  
UniRef90\_A3CUC8 D V E S I T T G V P T E R V K E I A R I Y A G A K N A V I Y C L G  
UniRef90\_A4TCP1 D G I P R K S P Q W A S S L C C G L S A D D L T A L A R M A A G R T L V T V S W S  
UniRef90\_T1XLC0 D G V A K S C A W A A P I C C D L P A Q Q L V D L A R S L V G K R T L V V S H S  
UniRef90\_L8DPU0 D G T M K T P Q W A S S I C C G I E P T V I A D L A R E M A S K R T M V T V T W S  
UniRef90\_A6GL11 P E A M S P I C G I P T E L R A V A R L Y A G A S A S I I L W G M G  
UniRef90\_Q5U9M0 D G I P K D A A W A S G V C G C A G S I R A L A R D M A R S R T L I T A A M S  
UniRef90\_A6UUJ1 P E Y V S K I C G V S P E L I V E A A K I Y A T S E K S I L Y C M G  
UniRef90\_I0DXJ1 D G I A K T P E W A E K I T T K V P A E T I R Q L A R E Y A T T K P A V M Q G W G  
UniRef90\_B6YU84 P E Y A E I T T G V P A K L I R E A A I T T G I P A T I R E A Y A T A G R G I V M W A M G  
UniRef90\_UPI0003723EA0 D E R G R T P E W A E R V S G V P A D D V R A L A R R M A Q K R T L I N V G W S  
UniRef90\_H4FBT1 D G V T K D A P W A A S I S G I E A A R I L L E L A D R A T R K T L I M M A W A  
UniRef90\_F5XWM5 P E A M E A V C G V P A G R I R E V J A R A F A S A K S A M I L W G M G  
UniRef90\_I8T8J0 P R D A S L A D I A A D C G L E V E A L E R F Y A L F A A T E R V I T C F S M G  
UniRef90\_UPI0003473D2E P R V A A G L C G I R E E D L M Q A A E W F G A S E A L S L Y C M G  
UniRef90\_K2RWB5 P E E A E K I T G V P A D L I R E A A L M Y A K A D S A A L L F S M G  
UniRef90\_A0A011Q7D9 P A A V A P I C C G L A E T D I K A A R W F G T A G A A L S L Y C Q G  
UniRef90\_D6CKF7 A E A M A P I C G I P A E T I R E V J A R A F A T S K A S M I L W G M G  
UniRef90\_P18775 D G V A K T P E W A S Q I T T G V P A D K I I K L A R E I G S T K P A I S Q G W G  
UniRef90\_Q5P7E5 P A I A A E V C G L G R R G A E D I V T A A R W W G E K A A M S W C Q G  
UniRef90\_Q9X6B6 D K T A K T P Q W A A I T T G V P A A K I I T L G R E I G S K P A Y I S Q G W G  
UniRef90\_UPI00036ACD0D P E D M A D I C G I D A Q T L R E V J A R T Y A T S E A S L I L W G M G  
UniRef90\_UPI00046ABAE1 P G T V A D I C G I S L E N L Q A C A E L T G R A P S F L S L W C M G  
UniRef90\_UPI00034AA4AF P E M V S G I C G I S Q D D L Q S V A R M I G S A P S F L S W C M G  
UniRef90\_I3BU76 P D I Q T V A K L C N L A A E D V N R F F Q L F G S T K K V V T V F S Q G  
UniRef90\_D8JV94 A D A M D L P A L I T E Q T G L D H R L L R S F F E L F A R T D R T V T V F S Q G  
UniRef90\_T0K2G7 F L A D Y A P D K V T G L I D L P A E Q I R E V J A R L F A D R N T M S M W T M G  
UniRef90\_I0GC96 G S V T A T A L I A T G L P E Q D V A A F F K M F R D T E R V V T L Y S Q G  
UniRef90\_N6Y268 P E R M E A V T G I P A A T V R E V J A R A Y A R G P N S L I F W G M G  
UniRef90\_NOAZ17 D G I P K T P E W A E K I C R V P A D K I R Q I A R E Y A T K P A A I I Q G W G  
UniRef90\_R118E8 P E T V A E I T T G V P A E D I V T A A R W I A E A G E W M S L W T M G  
UniRef90\_UPI00022607A8 P E A M A P I C G V A P D E I R A I A R L Y A T A E R A M I F W G M G  
UniRef90\_C4KAJ6 P A R V S E V T G V P E A D I R E L A R L Y G E T T P S C I R I G N G  
UniRef90\_UPI00035C7D51 P D L A T T A A H C G L D P A D V Q W L F E L F A R T E R S L T F Y S Q G  
UniRef90\_A0KL58 P E Y V E G I T G L K A A D I R A A I R T Y A S P A M I L W G M G  
UniRef90\_L1KT98 P D R A D I T G V P A A D L V A A R L Y G R A R Q P A I V Y G L G  
UniRef90\_U1ANQ4 P K M A A E I C G V R A E D I V T A A E W F G R S P A S L S L Y C M G  
UniRef90\_H4I2Q2 D G I A K N A E W A A E I C G V G V A K I R E L A A L F H Q N T M L M A G W G  
UniRef90\_A9DX1 P E K M A P I C G I E A D V L R D V A R T F A G A N A M I F W G M G  
UniRef90\_J0K5Z1 P E R V S A V C G I P E A D I A T A A Q W F A T S R A T L S L Y C Q G  
UniRef90\_N6XC6B P A V A A G V C G V A E A D I V T A A R W W G Q S P A A L S L W C Q G  
UniRef90\_UPI000378A0E2 P V T V S I T T G V P A E D I V R L A R M Y G S V T P A F I R I G N G  
UniRef90\_W0JVE1 P E E V E R L C G V P P A E L A S A A E T I A A A D T C V F G W A M G  
UniRef90\_UPI000367A3E5 P R K A A S I C G V K A A D I V Q A A L W F A A E H K T V S F W T M G  
UniRef90\_C6C7U9 D G I A K T P A W A A D I T G I P Q D R I I K L A R E I G S K P A Y I C Q G W G  
UniRef90\_UPI00036A03F4 P T R V A E V C G I T A Q D L R V E A A R L F A T S P A T L S L Y C Q G  
UniRef90\_H5V2C7 D G I K K T P E W A E P I T R V P A N T I R Q L A R D Y A T K P A A I I Q G W G  
UniRef90\_UPI0003681363 P E R V A A L T G M T A D E V R A L A R E Y A T T K P A A I R L N Y G



QUERY UniRef90\_M1F8G0 UniRef90\_UPI00016A6E59 UniRef90\_A0A011P634 UniRef90\_Q7VHL6 UniRef90\_M4R9F6 UniRef90\_L0MH18 UniRef90\_C5ALG0 UniRef90\_B9KDY6 UniRef90\_E7H0D2 UniRef90\_M8AIF1 UniRef90\_Q6LS20 UniRef90\_UPI0004000F92 UniRef90\_W71PV9 UniRef90\_D6DP24 UniRef90\_C6AN27 UniRef90\_B9D3R1 UniRef90\_Q7M863 UniRef90\_D4E287 UniRef90\_M5F713 UniRef90\_R7C0S5 UniRef90\_A3K4Z0 UniRef90\_A8I2H2 UniRef90\_C1DG74 UniRef90\_C6RED8 UniRef90\_G5S313 UniRef90\_Q47T39 UniRef90\_B8IXP8 UniRef90\_F8KTB6 UniRef90\_L0IWD6 UniRef90\_UPI0002EA24E1 UniRef90\_A6FCL9 UniRef90\_U4VWWW6 UniRef90\_Q21BK3 UniRef90\_J3DW88 UniRef90\_UPI000378066B UniRef90\_R11I48 UniRef90\_Q0S1F3 UniRef90\_UPI0002378936 UniRef90\_UPI000345ECFD UniRef90\_UPI000465E30C UniRef90\_Q50569 UniRef90\_Q0B8S8 UniRef90\_UPI0003650AF3 UniRef90\_A3CUC8 UniRef90\_A4TCP1 UniRef90\_T1XLC0 UniRef90\_L8DPU0 UniRef90\_A6GL11 UniRef90\_Q5U9M0 UniRef90\_A6UUJ1 UniRef90\_UPI00010DXJ1 UniRef90\_B6YU84 UniRef90\_UPI0003723EA0 UniRef90\_H4FBT1 UniRef90\_F5XWM5 UniRef90\_I8T8J0 UniRef90\_UPI0003473D2E UniRef90\_K2RWB5 UniRef90\_A0A011Q7D9 UniRef90\_D6CKF7 UniRef90\_P18775 UniRef90\_Q5P7E5 UniRef90\_Q9X6B6 UniRef90\_UPI00036ACD0D UniRef90\_UPI00046ABAE1 UniRef90\_UPI0003AA4AAF UniRef90\_I3BUJ6 UniRef90\_D8JV94 UniRef90\_T0K2G7 UniRef90\_I0GC96 UniRef90\_N6Y268 UniRef90\_NOAZI7 UniRef90\_R1I8E8 UniRef90\_UPI00022607A8 UniRef90\_C4KAJ6 UniRef90\_UPI000381ABCB UniRef90\_UPI00035C7D51 UniRef90\_A0KL58 UniRef90\_L1KT98 UniRef90\_U1ANQ4 UniRef90\_H4I2Q2 UniRef90\_A9DX1 UniRef90\_J0K5Z1 UniRef90\_N6XCB6 UniRef90\_UPI000378A0E2 UniRef90\_W0JVE1 UniRef90\_UPI000367A3E5 UniRef90\_C6C7U9 UniRef90\_UPI00036A03F4 UniRef90\_H5V2C7 UniRef90\_UPI0003681363

330 340 350 360

Q R M H H G E Q A H W M L V T L A S M L G Q Q I G L P G G G F G L S Y H Y S N G  
T Q R Q Q H H G E Q A S T W M L V T L A S M L G Q Q I G L P P G G G Y G L S Y H Y S S N G  
M Q R Q Q H H G E Q A S T W M L V T L A S M L G Q Q I G L P P G G G Y G L S Y H Y S S N G  
L Q R Q Q H H G E Q A S T W M L V T L A S M L G Q Q I G L P P G G G Y G L S Y H Y S S N G  
M Q R Q R A H H G E Q Q P H W S L V T L A S M L G Q Q I G L P P G G G F G L S Y H Y S S N G  
L Q R Q Q H H G E Q Q H W L V T T V A S M L G Q Q I G L P P G G G F G L S Y H Y S S N G  
T Q R Q Q H H G E Q Q V P W M L V T L A S M L G Q Q I G L P P G G G F G L S Y H Y S S N G  
M Q R A R H H G E Q Q P H W M L V T L A S M L G Q Q I G L P P G G G F G L S Y H Y S S N G  
P Q R A R Y G E Q Q P W M A V A L A C A L G Q Q I G L P P G G G F G L S Y H Y S S N G  
L Q R A D Y G E Q Q V P W M G I V L A A M L G Q Q I G L P P G G G F S Y S L G A L G N  
L Q R R M Q H H G E Q Q Y A W M L V V A A M L G Q Q I G L P P G G G F G F G W H Y N D M  
L Q R R S D H H G E Q Q Y W M G T V L A A M L G Q Q I G L P P G G G F G Y G Y G A E A N  
V Q R A D H H G E Q Q I W M S V V L A A M A G S M G R P G G G G W G T G Y A T M D A  
M Q R Q Q F H G E Q Q K Y W M L V T L A A M L G Q Q I G L P P G G G F G L S Y H F A N G  
L Q R Q Q H H G E Q Q Y W M G A V L A S M L G Q Q I G L P P G G G F S Y A H H Y S S I  
L Q R A D H H G E Q Q P F W A L V V L A M L G H V I G G K E G L G F E F S L G Y S S A  
F Q R A R H H G E Q Q P H W M L V T L A S M I G Q Q V L P P G G G F G C A Y H Y S S D G  
V Q R A R H H G E Q Q Y W M I A L A S M L G Q Q V L P P G G G F S F G Y G Y G A N D M  
L Q R A D H H G E Q Q Y W A I T L A A L L G Q Q V L P P G G G F G F G Y S S T N G  
M Q R A L Y G E Q A S W A G F A L A A V L G Q Q M L A G G G F I G T N Y H Y C S G  
L Q R G E H H G E Q Q Y W M S A V L A A M L G Q Q I G R P G S G V Y G Y G A I G G  
L Q R A Q F H G E Q Q V P W M A A T L A A M V G Q Q I G L P P G G G F N Y A L G A M G H  
L Q R A V H H G E Q P F W M T L V L A C L L G Q Q I G L P P G G G F G L G Y G A M N G  
I Q R Q Q H H G E M A Y W A L I T L A A M L G Q D I G K T G R G Y V M N D Q M H K N F  
V Q R M Q H H G E Q W S W M V V L A A M L G Q Q I G L P P G G G F G F G W H Y N G A  
V Q R A R Y G E Q P L W A G L A L A C L L G Q Q I G L P P G G G F A T P Y G S M G S  
L Q R A R Y G E Q P V W M G M V L A A A L G Q Q I G L S G G G Y A Y P L G A I A Y  
M Q R A R H H G E Q Q P H W M L V T L C A M L G Q Q I G S K G G G F G L S Y H Y S N G  
L Q R M D H H G E Q A H W M G L V L S A L S G S L G R R R G G G F A A G L G T L Q  
V Q R A R H H G E Q Q Y W M A I A L A A M L G Q Q I G L P P G G G F G F G Y G S M N G  
L Q R Q D H H G E M Q H W A T I A F S S M L G G I L G K P G E G V G F S W H Y G C G  
L Q R A E H H G E Q P V W L G L V L A A A L G Q Q P M G L P P G G G Y T Y A L G A L G H  
T Q R Q Q H H G E Q A P W A L V A L A G A M L G Q Q I G L P P G G G V S F G L H Y A D G  
V Q R A E H H G E Q T Y W A G I A L A S A L G Y I T I G L L G G G V V M G A G V G K M  
I Q R Q Q H H G E Q P Y W M A V L A T M L G Q Q I G L P P G G G I S Y A H H Y S S G I  
V Q R Q Q H H G E Q P Y W M G A V L A S M L G G I G L P P G A G V S Y A H H Y S S G I  
L Q R A R Y G E Q A L W A G I A L A C V L G Q Q V I G L P P G G G F G H G Y G S M N E  
L Q R A R Y G E Q A Y W A T V A T T A L L G Q Q I G T A G G G L G F G Y A C T A N L  
V Q R A R Q G E Q A Y W A L V A V T A L L G Q Q I G T P G G G I G F G Y A S T N L  
I T Q R H I T G T D N V S T A N L A M L T G N V I G K R G A G V N P L R G Q N N V  
L Q R A D H H G E Q P V W M V V T L A A M L G Q Q I G L P P G G G F S L L F G A N G I  
L Q R A D H H G E Q V Y W M G M V L A A M L G Q Q I G L P P G G G F G A G Y S A A G S  
I T E L S T G T D N V R S L G N L S M L T G N V I G R P P G T G V N P L R G Q N N V  
L Q R T R H H G E Q A P W M G L T L A A M L G Q Q I G L P P G G G F G H G Y G S M N E  
L Q R A E H H G E Q P V W M G A V L A A A L G Q Q I G L P P G G G Y N Y A L G T L A H  
L Q R T R H H G E Q A P W M G V T L A A M L G Q Q I G L P P G A G F G H G Y G S M N E  
I L S Q H T H G T D N A R C L I S L A I T G Q I G R P P G T G L H P L R G Q N N V  
L Q R Q E H H G E Q T W M A V V L A A L L G Q Q I G L P P G R G I G F G Y A S L S P  
V T Q F I H G V D N V K C C C N L S S I T G N I G K R G T G V N P L R G Q N N V  
P Q R H I C G E R S A R G A T L A T I T G N V G G V R G G W A A P Y G M A L N P  
L T Q H V T G A N V K A L A D L A L I C G Y V G R E G T G L F P M R G Q N N V  
V Q R A R Y G E Q P L W A G L A L A C C L G Q Q V I G L P P G G G F A S G Y G S M G N  
L Q R A D H H G E Q C Y W A A I A V A S L L G Q Q I G L P P G Q G F G F G Y A S V A G  
V S Q H V H G T D N A R C L I A L C T V A G Q I G K P P G S G L H P L R G Q N N V  
V N Q S S A G T D K V N S I N C H L L T G R I G K P P G A G P F S L T G Q P N A  
L N Q S S H G T D K N L A L I N L H L A T A Q I G R A G A G P F S L T G Q P N A  
I T Q H T V G T E N V M S T S N L S M L T G N I G R P P G T G V N P L R G Q N N V  
L N Q S S H G T H N A R A L I H L H L A T G Q I G R P P G A G P F S L T G Q P N A  
L S Q H V H G T D N A R C L I A L T S V T G Q I G K P P G S G L H P L R G Q N N V  
P Q R H A N G E I A T R A I S M L A I L T G N V G I N G G N S G A R E G S Y S L  
L N Q S T H G T H N G T A I A L A I L A T G K I G R P P G G C G P F S L T G Q P N A  
P Q R H S N G E N T S R A I A M L A I L T G N V G I N G G N S G A R E G S Y S L  
V S Q H T H G T D N V R S L I A M S L I T G Q Q I G R P P G T G L H P L R G Q N N V  
L N Q S S A G S A K N S A L I N L H L A T G Q I G K P P G A G P F S L T G Q P N A  
L N Q S S A G S A K N S A L I N L H L A T G Q I G K P P G A G P F S L T G Q P N A  
I N Q S S S G V D K G N A L I N C H L L S G R I V G K P P G M G P F S F T G Q P N A  
V N Q S A R G T D K V N A I N C H L L A T G R I V G K P P G A S P F S V L T G Q P N A  
L N Q R I R G T W A N N L V H N L L T G K I C G R P G N T P F S L T G Q P N A  
V N Q S A Q G T D K V N A I L N C H L L A T G R I G K P P G A S P F S L T G Q P N A  
V Q R H T H G T D N S R C L I A L A L M T G Q I G R P P G T G L H P L R G Q N N V  
P Q R H A Y G E Q I M R G A Q L A C L T G N V G K L G G W A A G T G Y  
L Q R T E H H G E Q G E Q P V W A G I A L A A M L G Q Q I G L P P G G H G Y G S M G D  
L N Q S I T G T W N T N A V C N L H L A T G T V C R P P G S G P F S L T G Q P N A  
I S Q H V H G T D N A R C L I A L A L A T G I V I G R P P G T G L H P L R G Q N N V  
L Q H H D N G G M C I R A I A C L P A L T G Q W Q Y P G G A L K G N S G F L A  
I N Q S S G A T D K A N A I N C H L A T G R V G K P P G A S P F S I T G Q P N A  
V T Q Y G Q A V D V V K G I A G I A L L T G N F V G R R G T G C G P V R G Q N N V  
V T E H L H G T D G V R S L A N L A L L R G A V T D R G H G V N P L R G Q N N V  
L N Q S S Q G T A K N L A L I N L H L A T G Q I G R P P G A G P F S L T G Q P N A  
M Q R Q Q F G E Q K H W M I V T L A A M L G Q Q I G T P P G G G F G L S Y H F A N G  
V S Q H I H G T D N S R C L I S L A L M T G Q Q I G R P P G A G L H P L R G Q N N V  
L N Q S T S G T A K N A A L I N L H L A T A Q I G K P P G A G P F S L T G Q P N A  
L N Q S T S G T H N G A A L I A L S L A T G K I G K P P G A G P F S L T G Q P N A  
L Q H H D N G G M C V R T I A C L P A I T G Q W L L K  
M T Q H S H G T Q N V L A L A N L A L V T G Q V L G K P N A G L S P F R G H N N V  
M N Q S I S G A D K N N A L N L H L A T G Q V L G K E G C G P F S L T G Q P N A  
P Q R Q M N G E L T S R A I A M L P I L T G N V G I N G G N S G A R E S T Y T L  
L N Q S S S G T A K N A A L I N L H L A T G Q I G R P P G A A P F S L T G Q P N A  
P Q R H I C G E R T A R G S T L L A T I T G N V G K K G W A A G Y G G I  
L Q R S E H G G T A R A V C M L P L I T G A W K H L G G G V Q L S T S G A F R

QUERY UniRef90\_M1F8G0 UniRef90\_UPI00016A6E59 UniRef90\_A0A011P634 UniRef90\_Q7VHL6 UniRef90\_M4R9F6 UniRef90\_L0MH18 UniRef90\_C5ALG0 UniRef90\_B9KDY6 UniRef90\_E7H0D2 UniRef90\_M8AIF1 UniRef90\_Q6LS20 UniRef90\_UPI0004000F92 UniRef90\_W71PV9 UniRef90\_D6DP24 UniRef90\_C6AN27 UniRef90\_B9D3R1 UniRef90\_Q7M863 UniRef90\_D4E287 UniRef90\_M5F713 UniRef90\_R7C0S5 UniRef90\_A3K4Z0 UniRef90\_A8I2H2 UniRef90\_C1DG74 UniRef90\_C6RED8 UniRef90\_G5S313 UniRef90\_Q47T39 UniRef90\_B8XP8 UniRef90\_F8KTB6 UniRef90\_L0IWD6 UniRef90\_UPI0002EA24E1 UniRef90\_A6FCL9 UniRef90\_U4VWWW6 UniRef90\_Q21BK3 UniRef90\_J3DW88 UniRef90\_UPI000378066B UniRef90\_R11I48 UniRef90\_Q0S1F3 UniRef90\_UPI0002378936 UniRef90\_UPI000345ECFD UniRef90\_UPI000465E30C UniRef90\_Q50569 UniRef90\_Q0B8S8 UniRef90\_UPI0003650AF3 UniRef90\_A3CUC8 UniRef90\_A4TCP1 UniRef90\_T1XLC0 UniRef90\_L8DP0U UniRef90\_A6GL11 UniRef90\_Q5U9M0 UniRef90\_A6UUJ1 UniRef90\_I0DXJ1 UniRef90\_B6YU84 UniRef90\_UPI0003723EA0 UniRef90\_H4FBT1 UniRef90\_F5XWM5 UniRef90\_I8T8J0 UniRef90\_UPI0003473D2E UniRef90\_K2RWB5 UniRef90\_A0A011Q7D9 UniRef90\_D6CKF7 UniRef90\_P18775 UniRef90\_Q5P7E5 UniRef90\_Q9X6B6 UniRef90\_UPI00036ACD0D UniRef90\_UPI00046ABAE1 UniRef90\_UPI00034AA4AF UniRef90\_I3BUJ6 UniRef90\_D8JV94 UniRef90\_T0K2G7 UniRef90\_I0GC96 UniRef90\_N6Y268 UniRef90\_N0AZI7 UniRef90\_R118E8 UniRef90\_UPI00022607A8 UniRef90\_C4KAJ6 UniRef90\_UPI000381ABCB UniRef90\_UPI00035C7D51 UniRef90\_A0KL58 UniRef90\_L1KT98 UniRef90\_U1ANQ4 UniRef90\_H4I2Q2 UniRef90\_A9DX1 UniRef90\_J0K5Z1 UniRef90\_N6XCB6 UniRef90\_UPI000378A0E2 UniRef90\_W0JVE1 UniRef90\_UPI000367A3E5 UniRef90\_C6C7U9 UniRef90\_UPI00036A03F4 UniRef90\_H5V2C7 UniRef90\_UPI0003681363

370 380 390 400

G S P T S D G P A L G G S D G G E G G G A T S I P C A R V V D M L L N P G G E F  
G A P T H E S P A A E G A A W L A G G G G S I P V A R R V V E T L L N N P G G K T M  
G S P S A T S P V L G G I D A F A G G S A A R R R F P V S R R V V E M L L N N P G G K P F  
G L S N D S T Q L L L G A I N A F G K P N P F F V V A R I V A D A L L N N P G N Q P F  
G S P T A T A P V V G G I N W L M Q G S D N N F F P L A R I I S D A L L N N P G K S I  
G V P S A T G G G I V G E K S W L D D A S K F S F P V V A R I V A D A L L N P G K T I  
G S P T A K G G I V A G I S A G N A P R P T P I P V A R I A D C L A N P G K T I  
V P T H T S P S L P G M T D G S S V K E L R A S I P V A R I V E M L R N P G K T I  
G T P T C K G G V I G G M T A G A V G I W K S F P V A R I A D A L L N P G K T I  
G W P I P A R P K A V W Q S A V P W G S R A V P V A R M A D V L A C P G K V I  
I G K N L L A V P L P T L Q Q L K N P V P D Y I P C A R I A D M L L N P G A E F  
S G F S G V T G V D P I H N G S Y K G Y S T Y I P V A R R V V D C I E N P G E T I  
V G S A S D G R S R A R I L P G P N P T G R Y I P V A R I S D L L L R P G G E E D  
T G V A E G R A S V A T I L P A V P N P V P D F I P V A R I A D T L L H P G G E V I  
G N P T R K A A V L A S M Q G G G V D A V D K L P V A R I V E A L E N P G G F Y  
G I P E S G A A M P G A F P L N G L D E D Q K P K Y D N T D Y K G Y L Q P G E T I  
S T R I S E K Y E N I D G A P W K T T K N I T I P S S R S I E A L E H P G K E I  
G V P A P I S V N S K M E G P W R K R K I P V I P V S R I V E C L E N P G K E I  
V G N P R V D T P G T M P V G S N P A N L A I P V A R I C D M L L N P G G E A Y  
A G R P E L G F R W P S L P Q G H N K V S G F I P V A R V A D M L L N P G G S F  
G A S V G F G P R L R G I T G R V A P A R A V I P I A R F A D A F L N P G G E T I  
V G K T L D A M S G M T F S Q L S N P V Q T R I P V A R I A D M L L R N P G Q L Y  
T G R Q I N A V P I P T L P Q Q G R N G V S T F I P V A R I A D M L L N P G G V F  
T G S G R K P F S G P R L E Q Q G T N P V R D F I P V A R I A D M L L R P G A P F  
V A P K L Q A F N P A V N E K Y I A P Q G K L A K A K Y H E I P N S R L D A I  
G T P G R K G I L S G F S G S T T V P P V H I P I A R F M D A I L E P G K V I  
Y G G G F T P R A L P R L P Q G R N S V D T L I P V A R I A D M L L C P G E P F  
Y G R R K N A K L L P T L S Q G S N S V R E F I P V A R I A D M L L L G P G E A Y  
G V P T C D H S D Q D T E W L R Q N A G L S L P V A R I A D A L L N P G G Q S I  
I G V R R G S H P K A A L S Q G E N P V K N F I P V A R I A D M L L F P G D S F  
V G N P R V I A T P G P E M P V G R N P A N L D I P V A R L S D M L L N P G G A Y  
G M P V S G K S M P A G L S Q G R N L V K A Y C P A S R I T E M L N N P G G E F  
Y G K H N L V S F P S L P Q G K N G I D R F I P V A R I A D M L L N P G G T R F  
G Y P R P T M P V V G G I S P G S N A V P N P F P I A C L S D A Y L N P G K T I  
M Q R R I I P F S V G S L P Q G K N A V S D Y I P L A R V T D M L E N P G G A F  
G V S S T G A A G P G G F P R N P D K P Q M N R I H K N Q D F K G Y S S T P V A  
G E P A T G A A G P G G F P R N L D P G M E P I P V A R W I E A I E E P G K V I  
P G L A P V P Y P L P T L P Q G L N P V R D F I P V A A I S D M L L N P G A F  
I G A H P L P Y Q L P T L P Q G G E N P V V R E Y I P V A R I A D M L L N P G Q E Y  
A G A E R R V F S G P R L P V G H N A V A T R I P V A R L A D M L L Q P G G E Y  
A G A E R R R F S G P R M P V G R N A V S T R I P V A R I T D M L L H P G G E N Y  
Q G A C D M G A L P A F Y P L G Y K K V I E E D A C A W G C S D L K C T P G L T V  
L T P R V D G M P R P T L P L G K N P V R T Y V P V G R V A D M L L H P G Q Q I  
V G N G A H R R K L T R L P L P N P V E A F I P V A R I A D M L L K P G A P F  
Q G A C D M G A Y P N V F S G Y Q K C E D D T I R K R M E E L W G A S E Y G V T  
A G L A P I R C G L P R L P Q G V N P V T T F I P V A A V S D M L L H P G E P T  
Y G K R N N A V L A A A L P Q G S N G V K E F I P V A R I S D M L L N P G G Q P F  
P G L A P V P Y P L P T L P Q G I N P V P D L V P V A A V S D M L L D P G G E F  
Q G A S D A G L I P M M F P D Y Q K V A Q Q R F E S L W N S S L S N T P G L T V  
V G N D E T P T A W P H L P Q G L N A V K T F I P V A R M A D M L L N P G G H H  
Q G A C D M G A L P N V Y P G Y Q K V N V P E I Y G K F E E L W N T E L S H D V  
E L R K T I M A G P K L F D N P V K A K I N I T N W V Q A C E D K N L V T P D N G  
Q G A C D M A A L P N V F P G Y Q K V T D D E A E I W G V E D L P S K P G L T I  
Y G G G A T P L G L P R M P Q G N N A V D S V I P V A K I S D M L L Y P G Q P Y  
I G Q P S P V R W P S L P Q G D N P I S D F I P V A R I A D M L L S P G T D Y  
Q G A S D A G L I P M M F P N Y Q R V G S P E A H A W F Q D F W G A R L D P Q P  
M G G R E N M L A S H M D L J R E A H R E L V Q R F W Q S P A I A S R T G L K A  
M G G M A T M L A A H R E I G N A A H R E E V A R L W G V P S V P A T P G L P A  
Q G A C D M G A L P V V Y P G Y Q A V I N E E L I G S W G C G D L S C A P G L T V  
M G G R E V G G S A H R D L A N P K H R D E V A Q L W G V P S V P A A P G R T A  
Q G A S D A G L I P M M Y P N Y Q L V S N P Q A H A W F E A F W Q T R L D N K P  
P F V R M P T L E N P I Q T S I S M F M W T D A I E R G P E M T A L R D  
M G G R E V G G M A N L M S G H R D H R A E V A R L W G V E D V P S T P G L T A  
P F V R M P T F E N P V K T S I S M F L W T D A I E R G P E M T A T R D G  
Q G A S D A G L I P M L Y P D Y Q S V E N A E I R S R M E D F W D R K K G L T V  
M G G R E T G S L S N L L P G H R D A A N A E H R Y W G V D A L P S Q T P G L T A  
M G G R E N L L P G H R E A N A K H R D A V A A Y W G V D S L P S N V G L S A  
M G G R E N Q L L A H L D I D N P Q H R D L V Q R F W Q S P R M A A Q A G L K A  
M G G R E V G G M S H M D I E N A E D R D R V R F W Q A P L V A A K S G L K A  
C G S R E V G A L S H L L P A H R E V V A N P K H R E E I A Q I W A K P G Y H T  
M G G R E V G G L A N H M N F T P P D I D R V R R F W K A R R I A T H E G L K A  
Q G A S D A G L I P M M L P D Y Q R V V A R A F E A L W Q A P L S D T P G L T V  
W N R A N I V Y P F A Y E N P V K A S I P C F L W T K A V E K G T E M T S A D G  
V G D T G P E L R V P Y L P Q G V N P V D E F I P V A R I A D L L L H P G R K Y  
M G G R E M G Y M G P G L P G Q R S A L V A A D R N F V E K Q W N D T G G D G A  
Q G A S D A G L I P M V L P D Y R P V G R A A F E E L W A T P L P A E P G L T V  
F D A A A L Q R P D L R S N P N A R V I N M N Q  
M G G R E N Q L A A H M D L J E N P S H L E T V A E F W Q A P R M A N K P G L K A  
Q G T C D M G M L P H Q F P G Y Q S V S A K F A K A W G V D A L S Q K P G Y R L  
Q G A S D M G A L P D L L P G Y G K V A R A R A E A V W G V Q V P E R P G L R I  
M G G R E V G G M A T M L A A H R D I A N P D H R R E V A A H W G V P E S R P A  
G N P T R R S A V L S S M Q A C G C D A A V D K I P V A R I V E A L E N P G G A Y  
Q G A S D A G L I P M F L P D Y Q P V G D D G M R S A F T E V W G S G D F S T V  
M G G R E V G G S A H R D L A N P A H R A E V A A L W G V A D V P A R P G K T A  
M G G R E V G G S A H R D L A N P A H R E E V A R L W G V D S V P A T P G L T A  
G G G A I K G N G G H V S H N A A A L T R P D L R R G K A R S V N M N R L  
Q G G G D M G T L P N T L P G Y P V D D A F E E V W D E P P A E V G L T V  
M G G R E N M L A A H R D Y T N P Q H R Q E V A K Y W G V D D V P Q R P G L T A  
E V E R M P V L S N P V K T K I S C F T W T D A I V R G T E M T A K R D G  
M G G R E V G G S A H R D M A N P Q H R A E V A A H W G L D Q V P G T P G K S A  
G N R K F M S E P E S I J A N P I T A K I S V M N W I Q A A D D A S K I T S E Q G  
F N A Q A L E R P D L M Y S S P L G R V A R V V N M S R L

QUERY UniRef90\_M1F8G0 UniRef90\_UPI00016A6E59 UniRef90\_A0A011P634 UniRef90\_Q7VHL6 UniRef90\_M4R9F6 UniRef90\_L0MH18 UniRef90\_C5ALG0 UniRef90\_B9KDY6 UniRef90\_E7H0D2 UniRef90\_M8AIF1 UniRef90\_Q6LS20 UniRef90\_UPI0004000F92 UniRef90\_W71PV9 UniRef90\_D6DP24 UniRef90\_C6AN27 UniRef90\_B9D3R1 UniRef90\_Q7M863 UniRef90\_D4E287 UniRef90\_M5F713 UniRef90\_R7C0S5 UniRef90\_A3K4Z0 UniRef90\_A8I2H2 UniRef90\_C1DG74 UniRef90\_C6RED8 UniRef90\_G5S313 UniRef90\_Q47T39 UniRef90\_B8XP8 UniRef90\_F8KTB6 UniRef90\_L0IWD6 UniRef90\_UPI0002EA24E1 UniRef90\_A6FCL9 UniRef90\_U4VWWW6 UniRef90\_Q21BK3 UniRef90\_J3DW88 UniRef90\_UPI000378066B UniRef90\_R1I48 UniRef90\_Q0S1F3 UniRef90\_UPI0002378936 UniRef90\_UPI000345ECFD UniRef90\_UPI000465E30C UniRef90\_Q50569 UniRef90\_Q0B8S8 UniRef90\_UPI0003650AF3 UniRef90\_A3CUC8 UniRef90\_A4TCP1 UniRef90\_T1XLC0 UniRef90\_L8DPU0 UniRef90\_A6GL11 UniRef90\_Q5U9M0 UniRef90\_A6UJU1 UniRef90\_I0DXJ1 UniRef90\_B6YU84 UniRef90\_UPI0003723EA0 UniRef90\_H4FBT1 UniRef90\_F5XWM5 UniRef90\_I8T8J0 UniRef90\_UPI0003473D2E UniRef90\_K2RWB5 UniRef90\_A0A011Q7D9 UniRef90\_D6CKF7 UniRef90\_P18775 UniRef90\_Q5P7E5 UniRef90\_Q9X6B6 UniRef90\_UPI00036ACD0D UniRef90\_UPI00046ABAE1 UniRef90\_UPI0003AA4AAF UniRef90\_I3BUJ6 UniRef90\_D8JV94 UniRef90\_T0K2G7 UniRef90\_I0GC96 UniRef90\_N6Y268 UniRef90\_N0AZI7 UniRef90\_R1I8E8 UniRef90\_UPI00022607A8 UniRef90\_C4KAJ6 UniRef90\_UPI000381ABCB UniRef90\_UPI00035C7D51 UniRef90\_A0KL58 UniRef90\_L1KT98 UniRef90\_U1ANQ4 UniRef90\_H4I2Q2 UniRef90\_A9DXY1 UniRef90\_J0K5Z1 UniRef90\_N6XCB6 UniRef90\_UPI000378A0E2 UniRef90\_W0JVE1 UniRef90\_UPI000367A3E5 UniRef90\_C6C7U9 UniRef90\_UPI00036A03F4 UniRef90\_H5V2C7 UniRef90\_UPI0003681363

410 420 430 440

Q F N G A T A T Y P D I V K L A Y W A G G N P F A H H Q D R N R M L K A W E K L E D  
Q Y N G R E I E L P D I K M A Y W A G G N P F A H H Q D R N R M L K A W R K E L E D  
D F N G T R A T Y P D I H L A Y W A G G N P F A H H Q D D R N N A M L K A W Q K P E D  
D F N G K T F T Y P N I K L V Y W A G G N P F A H H P D D T N Y L V K A W Q K P E D  
E H N G K K I T Y T D I D F I Y W A G G N P L V H H Q D D T N T L V K A W Q K P E D  
Q Y N G T E I T Y P E I K L V Y W A G G N P F T H Q Q D D T N N Q V K A W Q K P E D  
Q F N G A D V T Y P E V K M V Y V A G G N T F H Q H Q D D T N N L I K A W Q H P E D  
D Y N G G K L T Y P D V K L V Y W A G G N P F A H H Q D D R N E M V Q A W K K V E D  
D N N G S K I T Y P D I D F I Y W V I G G N P L V H H Q D D T N N N V K A W Q K P E D  
D W N G S R I E Y P D I L R L V Y W A G G N P F A H H P D D T R A L E A A W R R K P E  
H Y N G H T L R Y P D I L R L V Y W A G G N P F H H H Q D D I N R L R A A F R R K P E  
Q W N G H R D V T F P D M K M A L F C G G N N P F H H H Q D D R N K M I K A W R K L E  
D Y N G H R I T Y P D I R L V Y W A G G N P F H H H Q D D L N R L R A W A K P E  
D Y D G K R L T L P E L R L V Y W C G G N P F H H H Q D D L H R L S R A W Q A K P E  
Q H N G Q D R H F P D L K F V W W A G G A N F T H H H Q D D T N R L I R A W Q K P E  
N Y N G S K V V Y A P Y K M A I F T G C G N P F H R H Q S D R N K M K A F L Q K L E  
D Y D G T K I K L P H M R V A Y M A S G S M F T R H Q D D V N N I V K Q W R K F D  
L F D G E K I T Y P D I K L A Y W A G G N P F H H H Q D D R N R M L K A W R K F E  
E F Q N G A T R H Y P D I H L V H W A G G N P F H H H Q D D L N R L M E G W Q K P E  
E F N G A L S Y P D I R L V Y W A G G N P F H H H Q D D L N R L V E A W Q R P E  
D F N G R K L T Y P D I R L V W S G G N P F A H H Q P Q T L H L E R A W Q K P E  
D F N G Q C T P Y P D I R L I Y W A G G N P Y H H H Q D D L N A L H E R A W Q K P E  
A F N G A T Y V Y P R V R L I H W A G G N P F H H H Q D D L N R L R R A F S E A D  
D Y D G R R H R Y P D I R L V Y W A G G N A F T R H H Q D D L N R A F L H A W R R P Q  
M E P G K R I E M P R I R V M F N A N G S T F T R H P G T N R A V E A M K K I E  
N W N G K S V K L P P L K M C V F A G T N P F H R H Q Q I N R T I E G W R K L E  
D F N G Q R L R Y P E I H L V Y W A G G N P F H H H Q D D L A R L R A F A A P D  
R F N G K T L T Y P E I K L I Y W A G G N P F H H H Q D D L N R L K K A F A V D  
D H N G R K L T Y P N I D F L Y W V I G G N P L V H H Q Q N T N K N V R A W R K P R E  
E Y N G R S L H Y P D I R M I Y W A G G N P F H H H Q D D L H R L V R A W R K P E  
R F R G E T R H Y P D I K L V H W A G G N P F H H H Q Q L A R L R Q A W A R P Q  
T H N G S T H K Y P L V K M I Y N S G N N F M S H H Q Q D T N K L I K A L Q N V D  
D Y N G R Q L T Y P H I R L A Y W A G G N P F H H H Q D D T A R L R Q A F C Q K L D  
E C K G R K I T Y P D I R L V Y T S G G N Q L T H H H Q D D T N R V I E A F R K P E  
T Y N G Q H L I Y P D I D L I Y W V I G G N P F H H H Q D D I N R L R K A W T C P K  
R W L D C L E P D L K M M V I S G C G N P W H H H Q D D R N N M K K A F H K L E  
N Y N G S K V K L P P I K M V V V S G G N N P W H H H Q D D H N R M K K A Y H N I E  
D Y D G G R L T Y P D I K M L Y W A G G N P F H H H Q D D I P R L R A L A R P D  
E Y D G G E R R Y P D I R L V Y W A G G N P F H H H Q D D L A R L T E A F R R P E  
D F D G Q R L R Y P D I R L V Y W A G G N A F F H H H Q D D L N K L I T A W R R P E  
E F D G Q N L T Y P D I R L V Y W A G G N S F H H H Q D D L N R L I D G W R R P E  
V E M M N A A E G K L K A M Y I M G E N P M V S D P D I N Q V K E S L E N L E  
R C F G E T I T F P D I R L V Y S I G G N P F H H H A N A N L N R F L R A W Q P E  
D Y D G E R R R Y P D C R L V Y W A G G N P F H H H Q D D L T R L A R A W Q R P E  
L T E Q I T Q C G P D I K A M Y I F A L N P V V S Y P D S N H V M R S L E R K L D  
D Y N G L R L T Y P D I R L V Y W A G G N P F H H H Q N L P R L R R A L S R P D  
D Y N G Q R L T Y P H I R L A Y W A G G N P F H H H Q D D L A R L R A E A F R T L D  
D Y D G K R L T Y P N I K L V Y W A G G N P F H H H Q D D L G R L R A L G A R P D  
V E T M Q A I T A G T V K G M Y I L G E N P A M S D P D L N H A R K A L A D D  
Q Y N G R E L T F P D I R L V W W A G G N P F H H H Q D D L N R L I K A W Q K P E  
G L T I S E M C G D E L K C L I F I M G E N P M V S D P D I L N H L E H A F E S L D  
L K N A S E K L D T I K M I F S M A G N Y L T N Q N T D I L H A A K D E S K V E  
P E M I D A A K G E L K A L Y I M G E N P V M S D P N T K H V I E A L K N L E  
D Y D G E R K H F P N I R L V Y W A G G N P F H H H Q D D L K R L T R A F G R P E  
E H N G K T R T Y P D I K L V Y W A G G N P F H H H Q D D L N R L V E A W Q K P E  
G Y T V V E I L H H K V R G M Y V M G E N P A M S D P D L N H A R E A L A A L E  
V D L F K A I E S G E I K A V W I M A T N P V V S L P D A D Q V R R A L D Q C  
V E M F E A V R S G E I K A L W I A C T N P V H S L P D D A Q V R R A L D T A E  
V E M M H A A H D G D I T G M Y I M G E N P M L S D P D Q Q H V E A A L N N L D  
V E L F A A I L K R G G V K A V W I A C T N P A Q S L P D D Q A E V R A A L Q A A D  
G Y T V V E I L H H K V R G M Y V E G E N P A M S D P D L N H A R A Q A L C A L E  
G V R G K D K L D V P I K M I W N Y A G N C L I N Q H R T H E I L Q D D K K C E  
I E L F D A A Y D G R L K A L W I A C T N P A Q S L P E I Q E R V R E A L A R C C E  
V Q G K D A L D V P I K F I W N Y A S N C L V N Q H S E I N R T H Q D D K K C D E  
V E I M D A I H D G E I N G M F I Q G E N P A M S D P D Q Q H A R E A L S M L D  
I E L F D A V H A G K I K A L W I A C T N P A Q S M P D D Q N K V H E A L A A C C P  
I E L F E G V R Q G K I K A L W I A C T N P A Q S M P D D Q T L I H E A L A A C C P  
V D L F E A I H T G K V K A V W M A T N P A V S L P D S S R V R E A L E K C C P  
V D M F R A L A D G R I K A L W I M A T N P V V S M P D A G K L E D A L R N C C P  
I E L F R A A S G A L K V L W V V C T N P G Q S I P N K G T Y R E G M E K T F  
V Q L F E A I N R G E V K A L W V M G T N P A V S L P D A D F M R E A L K K L E  
V E I M D A A C E G R L R A M Y I E G E N P A M S D P D L D H A R A G L A K L E  
L E G A E K L D T N I K L I F S M A S N M L V N Q H A E I N K T K K D E S K V E  
D Y N G E V R R Y P D T R L V Y W A G G N P F H H H Q D D L N R L R R A F T R P D  
I A M F R A M E Q G E T K A C W I T C T N P V A T V A N R K H V V R A L E A A D  
V E T M D A I A G R V R G M Y I L G E N P A M S D P D L H H T V R A L E A R L E  
I G R A L L Q A E A P I R S M F V Y G S N P A V V A P D S E K V Q Q G L E R E D  
V D L F Q A I E R G D V K A V W I T G T N P A V S L P D S A Q V R R A L Q K C  
T E L G H K V E E G K C K A F Y I F G E D P A Q T E A L D G Q Q F R R A L L A G M E  
P D M F A A A R A G D L R A L W I T G E D V C A T D P D S N Q V A A A L D A C P  
V A M F E A L A R G E I K A V W L V C T N P A H S L P D D L A M A R Q A L S R A E  
Q H N G M N R H F P D I R F I W W A G G A N F T H H Q Q D T N R L I R A W Q K P E  
T E I M D A A V H D G D I K A M Y V L G E N P A M S D P D V D H A R D A L A K L D  
V E M F Q A A A D G E I R A L W I A C T N P A Q S M P D D Q A T V R R A L E R A E  
V E L F Q A V R E G R I K A L W I A C T N P A Q S M P E L E R V R R A L Q C C D  
G R A L L E L D P I R S L Y V Y N S N P A V V A P E T N K V R A G L A R E D L  
P E S F T E A H E G N V R G M Y V M G E N P A L S E P D I G H A E E A L R K L D  
T E L F D A L E A G T V K A V W I A C T N P I I S M P D A K R A E A A L R K A E  
V Q G R E Q L T P I K F I W N Y A G N C L V N Q H S D I N R T H E I L Q D C E  
V E M F E A A A D G Q L K A L W I A C T N P A Q S M P D D Q A T V R R A L Q R A E  
L K G A D K L D T N I R M L F S L A G N Y L A N Q N P D I N K I L A D E S K L E  
G H A L T E L S D P V K A F F V Y N S N P A A I A P N Q N A V L R G M A R P D



QUERY UniRef90\_M1F8G0 UniRef90\_UPI00016A6E59 UniRef90\_A0A011P634 UniRef90\_Q7VHL6 UniRef90\_M4R9F6 UniRef90\_L0MH18 UniRef90\_C5ALG0 UniRef90\_B9KDY6 UniRef90\_E7H0D2 UniRef90\_M8AIF1 UniRef90\_Q6LS20 UniRef90\_UPI0004000F92 UniRef90\_W71PV9 UniRef90\_D6DP24 UniRef90\_C6AN27 UniRef90\_B9D3R1 UniRef90\_Q7M863 UniRef90\_D4E287 UniRef90\_M5F713 UniRef90\_R7C0S5 UniRef90\_A3K4Z0 UniRef90\_A8I2H2 UniRef90\_C1DG74 UniRef90\_C6RED8 UniRef90\_G5S313 UniRef90\_Q47T39 UniRef90\_B8IXP8 UniRef90\_F8KTB6 UniRef90\_L0IWD6 UniRef90\_UPI0002EA24E1 UniRef90\_A6FCL9 UniRef90\_U4VWWW6 UniRef90\_Q21BK3 UniRef90\_J3DW88 UniRef90\_UPI000378066B UniRef90\_R1I48 UniRef90\_Q0S1F3 UniRef90\_UPI0002378936 UniRef90\_UPI000345ECFD UniRef90\_UPI000465E30C UniRef90\_Q50569 UniRef90\_Q0B8S8 UniRef90\_UPI0003650AF3 UniRef90\_A3CUC8 UniRef90\_A4TCP1 UniRef90\_T1XLC0 UniRef90\_L8DPU0 UniRef90\_A6GL11 UniRef90\_Q5U9M0 UniRef90\_A6UUJ1 UniRef90\_I0DXJ1 UniRef90\_B6YU84 UniRef90\_UPI0003723EA0 UniRef90\_H4FBT1 UniRef90\_F5XWM5 UniRef90\_I8T8J0 UniRef90\_UPI0003473D2E UniRef90\_K2RWB5 UniRef90\_A0A011Q7D9 UniRef90\_D6CKF7 UniRef90\_P18775 UniRef90\_Q5P7E5 UniRef90\_Q9X6B6 UniRef90\_UPI00036ACD0D UniRef90\_UPI00046ABAE1 UniRef90\_UPI0003AA4AAF UniRef90\_I3BUT6 UniRef90\_D8JV94 UniRef90\_T0K2G7 UniRef90\_I0GC96 UniRef90\_N6Y268 UniRef90\_N0AZI7 UniRef90\_R1I8E8 UniRef90\_UPI00022607A8 UniRef90\_C4KAJ6 UniRef90\_UPI000381ABCB UniRef90\_UPI00035C7D51 UniRef90\_A0KL58 UniRef90\_L1KT98 UniRef90\_U1ANQ4 UniRef90\_H4I2Q2 UniRef90\_A9DXY1 UniRef90\_J0K5Z1 UniRef90\_N6XCB6 UniRef90\_UPI000378A0E2 UniRef90\_W0JVE1 UniRef90\_UPI000367A3E5 UniRef90\_C6C7U9 UniRef90\_UPI00036A03F4 UniRef90\_H5V2C7 UniRef90\_UPI0003681363

490 500 510 520

A I L V A M K K V V D P L Y E A R R S D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
H L V A M K K L V V D P L Y E A R R S D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
H F L A M K H K V V D P L Y E A R R S D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
H I I P M K K Q V V D P L Y E A R R S D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
H I V P M K K Q V V E K Q F E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
Y V F P M K H Q C V V P P Q H E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
H I V P M K K V I E P L Y E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
N I A P M K Q Q V I L N P V V G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
G I L V F M R K Q V I L N P V V G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
L M I A M K R L I D P V V G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
G I L A L P K Q V I E P M F E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
U P I 0 0 0 4 0 0 0 F 9 2  
H L V A M P K V R E P A G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
H M V P M K R V V A P R D Y E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
G V I A M K Q L I D P L Y E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
I V T Y K P A I E P M G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
Y I E A M K K A V I E P A G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
Y V L A M H Q A I A P Q H E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
L M V A M K R I Q P V E E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
G L C T M Q Q V I H P V V G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
H L F H M P R L V S P V V G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
R L I A M R Q V A S P I V G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
F M L A M K R A I E K P V V G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
L F A I K P L V K P V A G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
G I A M K Q V V S P Q F E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
R L R V M R R A I P P H G A A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
L L V P M R Q I A P P Y G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
H I V P M K Q A I L P V V G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
T L S A M H R A V I E P P S G V V T D Y E I F S D L A T R L G F R D A Q F T T E G R D  
Y V L A M H Q A I A P Q H E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
K V Y A M R Q T I K P Q A E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
H L I A M Q P V A Q P P L F E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
L T A A H A A V D P P L F E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
W L T P M R Q S L K P Y L D A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
G I I A M K K L V D P L Y Q S R T D F E I F T L A R K L G K G Y E F F T T E Q G R S D  
G V L A M H K L V D P L Y Q S R T D F E I F T L A R K L G K G Y E F F T T E Q G R S D  
L L V A M H A A V G P Y A D A Q D D Y D T F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
A L I A M H Q V V P P L G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
F M I A M R Q V I D A F A E A R S D D Y H I F S A L A E K L E F A A S Q F T T E G R S D  
F M I A M R Q H L P P Q G E A R S D D Y A I F S A L A E K L D F T A Q F T T E G Y S D  
R V Q Y I R K A A D A P V G E A K D D W Q I C E I V A N K M G A D F A K Y S S A E D R D  
Y W L A M R Q V I E P V G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
T L V A M E Q A F P P Y G E A R S D D Y A I F A D L A G R L G E G F R A A Y D F N T S A E R D  
R I N R V R K A V T E T Y A Q A R D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
M L M A M P R A L T E T Y A Q A R D D Y D T Y A A L A G H L G V R Q A F N T S A E R S T  
M V V A M H R I A E P C G L A R D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
L L V A M E P A A A R Y A N S R D D Y D T F A E A L A T K L G V G E G F F T T E G R S E  
L V Q L G Q A A I D P P G G A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
H L I A M K Q M S E P L G E A Q S D Y A I L T Q I A R A V G L I A D E Y T E G R N  
R V Q K I R K A V N P P P G E A L E D W L I K K L A E K M G Y G E M F N Y T S H  
L I L S E K A I E P P F E R R T D Y D W L C D V A E K L G V R D A F T T E G H E  
R V Q W N F K A I E P P G E A K P D W E I L T M L G K A L G P K F D Y S D V I E D  
A L R A M P R V V P P H G Q A R D E Y D T Y D L A E R L G V R E E F T T E G R T  
F F G Y S T H L A A A P T G V L S H H E L R L I S A R L G T E S A F T T E E R T  
M V Q L G R Q A I D A P G D A K P D L W L I Q Q I A G R M G L N W H Y E G G  
C I S R Q R A F V P P L G E A R P D W W M L S E V A R R W G H A A Q F H E F D  
R I S R V R A A V P A A G E A K P D W W A D Q V A Q R M Q Q R L A F G F G S P  
R V Q Y I R K A V D G P G E T R D D W E I V S D I A T R M G S D F K F T S A E D  
C I T H L T P A A P P G E A R P D W Q I A V Q D F A R R L G T R L E F P Y A D A  
M V Q L G R A L N P P G D A R H D W L I Q Q M A A R M G L N W H Y P G P E  
S Y V F N D Q V I K P R F E C K T I Y E M T S E L A K R L G V E Q Q F T E G R T  
R I T R V H R A J L T P P G E A R A D W R I V C D F A H E L G P R I Q G F P Y A V P  
Y V I F A D Q X V I K P R F E C K N I Y D I T S G L A R H M G V E Q K F T E G R T  
Q V Q I G R A A V S P P G E A R D W E I T Q E I A K R M G L S W S Y S H P R D  
R V S H V R R A V P A P G E A R P D W A I T T E F A Q R L E P L L R P G L P S F  
R I S R V R A A V A A P G E A R D W A I V C D L A T R L L E A Q L R P G O P S F  
T I S R Q L P F L P A P G A A R Q D W E I L R D V A H A M G F S T Y F H E F R T  
R L S R Q R S F L P L P G E A R P D W W L V C E V A K H M G F G A A F D Y K S T N  
R T Q H L A K A V E A P G E A K P D V W A L I E V A K R L G F G D L F P Y K T N  
R I S R Q R A F L P A P G E A R P D W W I L S E T A K R L G F G D S F N Y E F R  
L V Q L G Q P V L P L P G D A R D E Y W I L Q E M A R R L G L D W H Y A G P H  
Y V V L G Q K T I L P L Y E C R D E Y D V F A D V A E K L G V K D K Y L E G R T  
H L I A M H R I A P P A G E A R D D Y T I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
T M T L G R A Q A V P P P G E A L A D W D I T A R V A C A M G F E Q D Y F T T S D  
Q I T L G R A A V P L P G E A R P D W W I L Q Q L A R C L G L D W Q Y A H P R E  
Y I Q L Q Q P V I Q P Y G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
R L S R Q R G F L K A P P G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
G F R F Y K A V T P P D N V K P D W A I F S L M A T A M G Y G E A F Y A R D E F R Q  
R F Q R V R A V P P P G E T R S D F D A V H A L A G L M G G D L G C P T P A D  
R V S R V R A A A P P P G E A R N D G W I T A A E F G R R L A A R L H P D E A D H  
H L V P M K Q V V P P R D E A R N D F V F A D L S E R W G G Y A R F T E A G S  
Q V Q M G R A V T P P G E A R E D W W I E V E L A K R L G L D W S Y E S P A D D  
R I S R V R A A V P A P G Q T R H D W A I G V Q F A H R P G A P S L F P Y A D G  
R I T H V K R A L P P A E A R P D W R L V C D F A R A L G P A H M F A Y A T V  
Y L Q T Q E P V I E P Y G E A R S D D Y D I I F A A I A E A D R K L G K G Y E F F T T E Q G R S D  
R V Q L V G K A V D T P G A A R Q D W R I L Q D L A N R L G Y D W S Y D S P A E D  
T I N H L Q Q A L P A A G V S R P D W D F A R V L G K L G E N W D D A F T F D  
G Y I F I Q P A T S A K Y E R R P I Y D I L S E V A R R L G P H Q R F T E G R T E  
R I S R V R A A L P P A G E A R H D W A I G V Q V A H R P G Q A T L F P Y P T E  
V I L S E K L V E P P F E R S D Y E W L R E V A A K L N V E P A F S E G R D E  
H V Q L S D Q A I A P L G E A R S N V W L F G Q L G Q R I G F T E A C F R D T E

QUERY E M G W I S S F Y E A A V K Q A E F K N V A M P S F E D F W S E G I V E F P I T 530 540 550 560  
UniRef90\_M1F8G0 E M D W I R G F Y E E A K I E A R A K G M E M P V F D V F W D K A L A F F P V L K D  
UniRef90\_UPI00016A6E59 E M G W I R V F Y E A A R V Q A R G M E M P V F D V F W R K A L A F F P V L R E  
UniRef90\_A0A011P634 E M Q W L A E F Y Q V A F D A A Q K A E R P L P N F D T F W A E N F S F F S E R E Q  
UniRef90\_Q7VHL6 E M Q W I A E E F Y N Q A L K Q A E G L M L T M P S F K E F W E E N P L R F F E T P A E  
UniRef90\_M4R9F6 E M Q W L K G G M Y Q T A F D A A K N R V N M P R F F E K F W E E N K P F P V K E  
UniRef90\_L0MH18 E T Q W L K Q G F Y D D M K Q A R N A H V A L P P F F D M F W Q S E N N Y V R F P V  
UniRef90\_C5ALG0 E M D W I R R F Y E K G R L V A R A K G M E M P V F D V F W E S D A P F P L A K  
UniRef90\_B9KDY6 A K D F I K R E Y Y N S A A L K Q T Q A Y G D P M P S F E A D F W A N G P I T F A P T L  
UniRef90\_E7H0D2 E A G W I Q E R L Y E E A A A A G A Q N A E L P S A F A D F V K N G V H L Y A Q N  
UniRef90\_M8AIF1 S G E W L A F L Y E T T R Q A L A A G G H D A P D F E T F W K R G E L L L P V  
UniRef90\_Q6LS20 Q M E W I E E F Y N G A R R L Q G R G L G V R M P P F F K F W E E G F I E F P  
UniRef90\_UPI0004000F92 E M G W V Q H F Y E N D R R T A A E A G L E L P P G F Q E F W E R G H V E L P L S  
UniRef90\_W71PV9 E S D W V R H L Y E Q T R A A L G G D A A L P P G F D D F W R N S T A E L P A L  
UniRef90\_D6DP24 D L Q W L E T F Y Q I A S Q R G N A Q G V T L P P F A E F W Q L F E M P E S E  
UniRef90\_C6AN27 E M E W V E S L Y E D C A R S K E N G A Q K F D M P P F A E F W K G Y V M F P  
UniRef90\_B9D3R1 E L G W M K E F Y A D A S E Q A K G L N L S M P S F E E F Y E K G Y V R F E K D  
UniRef90\_Q7M863 K E A W I E S S F Y Q Q S K E K A A K S G V P M P S F E E F W W K G Y V K F E T P A  
UniRef90\_D4E287 A R Q W I Q H L Y R Q C G L A Q A G T G V A W P A F F E T F W Q G Y V E L P P  
UniRef90\_M5F713 A D E W I Q L L Y S Q A A K N A A A V G I E M P P F E R F W H D G H A E L R R Q  
UniRef90\_R7C0S5 E T D W I R T L Y E E A R T S P L G R A T G L P D F E T F W K T G L I R Y P D K  
UniRef90\_A3K4Z0 A D D W I E L L Y A D F R E R T A V A Q G T D I L P D L D G L R Q Q N W I K L P R  
UniRef90\_A8I2H2 V R E W L A H L Y E Q T Q E A L E N A G L F A P S F E E F W E R G E I P L P S  
UniRef90\_C1DG74 T L D W L R R E S Y E G S A R Q R A R E G M I E L P D F E V F W A E G C F E V P R  
UniRef90\_C6RE8 E L E W V R E I Y E N A A Q R A E G M G I A M P K F E E F W K G Y V K F D K I  
UniRef90\_G5S313 E M G W L K R I W Q E G S Q Q G K G R G I H L P T F E V F W N Q Q E Y I E F D  
UniRef90\_Q47T39 V R Q W L R H L Y E E W R E R Q G P E V E L P D F E D F W A D S G G V D I P H R  
UniRef90\_B8XP8 V R Q W L E H L Y E P T R L G L V Q L N L P A P S F E D F W A S S G I L V P Q  
UniRef90\_F8KTB6 P K D W I K Q F Y N N A L K Q T Q S F G A A F A T P M P S F E E F W A K N K P I  
UniRef90\_L0IWD6 A S A W V R E L Y E R T R T G L A E T V E I L P P F D T F W Q Q H H V T L P E P A  
UniRef90\_UPI0002EA24E1 E R A W I A A L Y A R C R D A Q A S A G I E L P A F D Q F W R T G Y V A L P A P  
UniRef90\_A6FCL9 V M Q M I E A A Y S K S S A T M P F K A F W E Q G I A H M E V P  
UniRef90\_U4VWWW6 A R G W L Q H L Y H Q L Q E K L A A H Q V Q T P D F N Q F W Q G L L A L P Q  
UniRef90\_Q21BK3 E M E W V Q F F Y D A A K A Q S K A V K M P D F D E F W A G E G I E F P A  
UniRef90\_J3DW88 A A Q W V K H L Y G V T Q Q N A K A V G I T L P S Y E E F N D G P I D L R P M  
UniRef90\_UPI000378066B E M Q W V E E L Y S D C V E S N K A N F P M P D F K T F W K E G F V D F G  
UniRef90\_R1148 E M Q W V E K L Y N C V T A N K G N F E M P D F E T F W K D G Y V G F G  
UniRef90\_Q0S1F3 S E Q W L E H L Y G Q W R D F V R A D G G P A P S F D D F W A Q G H V R M R  
UniRef90\_UPI0002378936 E F W W L E H L Y E Q W R Q R F D P G L D F R Q F W A G R I E E L A G  
UniRef90\_UPI000345ECFD S F A W L Q H L Y E A S R P R A E A D G I T L P P F A E F W R T G K L E Y A R A  
UniRef90\_UPI000465E30C A R G W L E K I Y Q D S R P R A A E D G I Q L P D F E D F W A Q G K L E Y A A  
UniRef90\_Q50569 I F E E I R E V T P Q Y A G M N P E R L V K P E G L H W P C P  
UniRef90\_Q0B8S8 E S G W L R H M Y D V A R N T A Q K N G F T L P D F A T F W A D G Q Y R F P Q P  
UniRef90\_UPI0003650AF3 V D G W L R Y L Y A G L R R Y P E L P D Y E A F R H R G Y H R F G A G E P P V  
UniRef90\_A3CUC8 I W D D M R R V T P S M A G A S Y A R M E K P E S V H W P C P  
UniRef90\_A4TCP1 S R Q W L R H I Y E T W S R T L D F D V P A F D G F W A G A L R L P  
UniRef90\_T1XLC0 T R E W L A H L Y E R T R T G L E D L G L E A P D F E T F W Q R G E L M L P Q  
UniRef90\_L8DP0U S Q Q W L E H L Y E Q W R G Y L R V G G V V T P E F E D F R R V G S F R M Q  
UniRef90\_A6GL11 V F D E M R H A M H S I E G I T W O R L E R E H A V V Y P C A  
UniRef90\_Q5U9M0 E A E W L R Y L Y K Q L E H S P A L G G K T I P S F D E F W D Q G W L E V P F D  
UniRef90\_A6UJ1 E D I F N E I R K A N T P Q Y A G I T Y G E L L G T D G L H W P C K  
UniRef90\_I0DXJ1 D R D W I E F L V N D A A Q K R P E D N I P T F D E L L I K R R H L L T H R  
UniRef90\_B6YU84 I T R E I T L V A P Q Y R G I L L A R H H L E V P D F D E F W E R G R L E M P G R  
UniRef90\_UPI0003723EA0 S G E W M R L A Y E R W R S L L A R H H L E V P D F D E F W E R G R L E M P G R  
UniRef90\_H4FBT1 E A Q W L E H L Y D A A R S D A A S H H I A M P A F V E F W Q S G L I E V A N R  
UniRef90\_F5XWM5 H A G V A A V Y E E M R Q A M H G A I A G I S W Q R L E R E G S V T Y P C L  
UniRef90\_I8T8J0 E H A R L S A F E N E G A R Y F D I G G L A G L D A H A Y D A L A P L R W P V P  
UniRef90\_UPI0003473D2E E A A F D E H R R L T V G R D L D I G G L S Y A V L E A Q G P Q Q W F P P  
UniRef90\_K2RWB5 I F E E V R S V T P Q Y A G M N P E R L S K P E A L H W P C P  
UniRef90\_A0A011Q7D9 E A I G V I E H R E S T R M R D L D I T G L S Y A L L D T A G P Q Q W P F P  
UniRef90\_D6CKF7 Q G F A A V Y E E M R Q T M A E A I G G I T W E R L E R E G S V T Y P C L  
UniRef90\_P18775 Q E E W M R H L Y A E M S R E A I P E L P T F E E F R K Q G I F K K R D P  
UniRef90\_Q5P7E5 S E I F A E H A A S T A G R D L D I T G L S Y D L D S A G P Q Q W P F P  
UniRef90\_Q9X6B6 Q E E W M R H L Y A S T A G R D L D I T G L S Y D L D S A G P Q Q W P F P  
UniRef90\_UPI00036ACD0D V F N E M A Q I M P S L N N I T W E R L E R E N V V T Y P C S  
UniRef90\_UPI00046ABAE1 A F D S A E M L F D E E Y K Y L T Q N R D L D L C S Y A L L D H Q G P Q Q W P F P  
UniRef90\_UPI0003AA4AAF D F A S P Q A L F D E E Y R G L T A G R D L D Y S S Y A L I D E L G P Q Q W P F D  
UniRef90\_I3BU76 E H A A L S T F E N S G S R C F D I G A W Q Q L S A A E Y D A L P P T Q W P L D  
UniRef90\_D8JV94 E H A A L S G F E N N G T R D F D I G K F A N L S E T E F D R L E P F Q W P R H  
UniRef90\_T0K2G7 D E I W E E E Y R K C T I G T K M E L P T Y D R L K K E R G L T W P V H  
UniRef90\_I0GC96 E H A A L S A F E N N G S R D F D I G A L T S L S D D A F D A L K P V Q W P A R  
UniRef90\_N6Y268 V F A E L A Q A M P S Y A G L S W D M L E R E G A V V A P K F  
UniRef90\_NOAZ17 T L D L V K E S T K R T K K E L D P N F T F D E F R K T G V H H F K  
UniRef90\_R118E8 P R E W L E H L Y R S W R E E P T F D R F W A D G E L R L P P G  
UniRef90\_UPI00022607A8 V F A E A S R F T N P K T G Y D I A G V S H A R L R E G P V Q W P A P  
UniRef90\_C4KAJ6 V F A E M K A M R S L D H I D W A R L E R E G A V T T P C P  
UniRef90\_UPI000381ABCB A E L I G A A L D D A P N P Y I E E V T Y D R L A E R G Y M R  
UniRef90\_UPI00035C7D51 E H A R L S G Y Q N A G S R D F D I S A L A D L S R T Q Y D A L A P I Q W P V T  
UniRef90\_A0KL58 I W D E L R G L C P L Y A G V S H A R L D R E G A V W P P C P  
UniRef90\_L1KT98 A L A E C G R I A S V F A G L S H A R L D R E G A V W P P C P  
UniRef90\_U1ANQ4 F A Y A D A R Q E H R A L T V G R D L D M G G L D Y A L L E A R G P Q Q W P L F  
UniRef90\_H4I2Q2 E L Q W L E T F Y N V A R Q R G A  
UniRef90\_A9DX1 V F A E M K L N M K S F D N I T W D R L A R E N A V T Y P S L  
UniRef90\_J0K5Z1 D A D A A E A V W N E H R E T T R G R D L D I T S W A L L E A N G P Q Q W P L P  
UniRef90\_N6XC6 E A I F A E H V A S T A G R D L D I T G L D Y A L L D S A G P Q Q W P L T  
UniRef90\_UPI000378A0E2 E D L I R Q A L D Y P D N P A Y E G I T L E I L R E K S  
UniRef90\_W0JVE1 V M D E I A D L T P I Y G G I S H G R L E N E G G L Q W P C R  
UniRef90\_UPI000367A3E5 N T E A V F N E H R G L T Q G K D V D I T G L S Y A L L D T Q G P Q Q W P F P  
UniRef90\_C6C7U9 Q R Q W L T Y L Y D K T R A K D P T L P D F E T L R A M G I Y K R K D P  
UniRef90\_UPI00036A03F4 A P E A V E A I W C E H R E S T R G R D L D I T S Y A L L D R Q G P Q Q W P L P  
UniRef90\_H5V2C7 E K Q W L E H I V E T T R A M P D E N M P D F A Q L Q V Q R R H L F  
UniRef90\_UPI0003681363 Q D M L T Q V L S D E K H E T H P Q M H G I T L D Q L R T Q H S V

QUERY UniRef90\_M1F8G0 UniRef90\_UPI00016A6E59 UniRef90\_A0A011P634 UniRef90\_Q7VHL6 UniRef90\_M4R9F6 UniRef90\_L0MH18 UniRef90\_C5ALG0 UniRef90\_B9KDY6 UniRef90\_E7H0D2 UniRef90\_M8AIF1 UniRef90\_Q6LS20 UniRef90\_UPI0004000F92 UniRef90\_W71PV9 UniRef90\_D6DP24 UniRef90\_C6AN27 UniRef90\_B9D3R1 UniRef90\_Q7M863 UniRef90\_D4E287 UniRef90\_M5F713 UniRef90\_R7C0S5 UniRef90\_A3K4Z0 UniRef90\_A8I2H2 UniRef90\_C1DG74 UniRef90\_C6RED8 UniRef90\_G5S313 UniRef90\_Q47T39 UniRef90\_B8IXP8 UniRef90\_F8KTB6 UniRef90\_L0IWD6 UniRef90\_UPI0002EA24E1 UniRef90\_A6FCL9 UniRef90\_U4VWWW6 UniRef90\_Q21BK3 UniRef90\_J3DW88 UniRef90\_UPI000378066B UniRef90\_R11I48 UniRef90\_Q0S1F3 UniRef90\_UPI0002378936 UniRef90\_UPI000345ECFD UniRef90\_UPI000465E30C UniRef90\_Q50569 UniRef90\_Q0B8S8 UniRef90\_UPI0003650AF3 UniRef90\_A3CUC8 UniRef90\_A4TCP1 UniRef90\_T1XLC0 UniRef90\_L8DP0U UniRef90\_A6GL11 UniRef90\_Q5U9M0 UniRef90\_A6UJU1 UniRef90\_I0DXJ1 UniRef90\_B6YU84 UniRef90\_UPI0003723EA0 UniRef90\_H4FBT1 UniRef90\_F5XWM5 UniRef90\_I8T8J0 UniRef90\_UPI0003473D2E UniRef90\_K2RWB5 UniRef90\_A0A011Q7D9 UniRef90\_D6CKF7 UniRef90\_P18775 UniRef90\_Q5P7E5 UniRef90\_Q9X6B6 UniRef90\_UPI00036ACD0D UniRef90\_UPI00046ABAE1 UniRef90\_UPI0003AA4AAF UniRef90\_I3BU76 UniRef90\_D8JV94 UniRef90\_T0K2G7 UniRef90\_I0GC96 UniRef90\_N6Y268 UniRef90\_N0AZI7 UniRef90\_R118E8 UniRef90\_UPI00022607A8 UniRef90\_C4KAJ6 UniRef90\_UPI000381ABCB UniRef90\_UPI00035C7D51 UniRef90\_A0KL58 UniRef90\_L1KT98 UniRef90\_U1ANQ4 UniRef90\_H4I2Q2 UniRef90\_A9DXY1 UniRef90\_J0K5Z1 UniRef90\_N6XCB6 UniRef90\_UPI000378A0E2 UniRef90\_W0JVE1 UniRef90\_UPI000367A3E5 UniRef90\_C6C7U9 UniRef90\_UPI00036A03F4 UniRef90\_H5V2C7 UniRef90\_UPI0003681363

E G A N F V R Y A D F R E D P L F N P 580 L G T P S G L I E I Y S K N I E K M G Y D  
ENKQYFVRHEADEFRRNDPDLFNSALGLGTPTSGKLEIEIYSSRSTNAIEAKMGYD  
DANKQYVVRHYKAFRRNDPDLFNSALGLGTPTSGKLEIEIYSSRSTNAIEAKMGYD  
UniRef90\_A0A011P634 UNKQYFVRHYKAFRRNDPDLFNSALGLGTPTSGKLEIEIYSSRSTNAIEAKMGYD  
ESESFVVRYYAEFRNDPDLFNSALGLGTPTSGKLEIEIYSSRSTNAIEAKMGYD  
AAAKKQWVRFADYFRNDPDLFNSALGLGTPTSGKLEIEIYSSRSTNAIEAKMGYD  
UniRef90\_L0MH18 PEAERFVTAFADEFRAADPDLFNSALGLGTPTSGKLEIEIYSSRSTNAIEAKMGYD  
GPTDYVYAFDEFRAADPDLFNSALGLGTPTSGKLEIEIYSSRSTNAIEAKMGYD  
UniRef90\_C5ALG0 ESMERFVRFSEDEFRAADPDLFNSALGLGTPTSGKLEIEIYSSRSTNAIEAKMGYD  
UniRef90\_B9KDY6 PAERFVTAFADEFRAADPDLFNSALGLGTPTSGKLEIEIYSSRSTNAIEAKMGYD  
UniRef90\_E7H0D2 K P D D G G P A R A F L R D P G T K P L L A T P S S G K I E I Y S E T T V I E G F G Y D  
UniRef90\_M8AIF1 E S G A E W V R H E A S F R K E P D L E P L L G T P A S S G L I E I Y S K R I I A D M G Y D  
UniRef90\_Q6LS20 S K P K L L L E A F R A D P V A N K L P T P S S G R I E I Y S E R I I A D M G Y D  
UniRef90\_UPI0004000F92 T G P F H G S F E A L R A D P R R S P L L S T P S S G R I E I Y S E E I I D S F G Y D  
UniRef90\_W71PV9 Q N A R K F V R F A D F R R D P P E N H P L L K G T P S S G K I E I Y S E I I A S F G Y D  
UniRef90\_D6DP24 E G K P W V R H A D F R D D P E L H A L L G T P S S G F I E I Y S N K I A S F G Y D  
UniRef90\_C6AN27 N T E T E L Y T R L F R E N P A K N R L L G T P S S G K I E I Y S P T I I A K M N Y A  
UniRef90\_B9D3R1 U N E S A K F I K Y K D F R D N P L T H R L L Q T P S S G K I E I Y S R K I A G Y D Y K  
UniRef90\_Q7M863 E R D F V F Q D F R D D P H T H P L L G T P S S G K I E I Y S E K I A G Y D Y Q  
UniRef90\_D4E287 I N S Q T F L G T F R A D P P E R H R L L A T P S S G R I E I L F S S T I I D A F G Y D  
UniRef90\_M5F713 K A T E T D G L E A F F A N D P D A F P L L G T P S S G R I E I L A S P Q I I A A M H Y N E  
UniRef90\_R7C0S5 S E R G H S Y F G A F R A D P A R A P L L G T P S S G R I E I L A S E T I I A D G F G Y E  
UniRef90\_A3K4Z0 A P D D G G L L R A F R A D P Q A A P L L G T P S S G R I E I F S E T I I A G F G Y D  
UniRef90\_A8I2H2 P A Q Q T L L E E F R D D P E A H P L L G T P S S G R I E I H S E R I I A G F G Y A  
UniRef90\_C1DG74 D E K Y F T N Y A D F R A D P P E K N A L L G T P S S G K I E I L Y S E A V I A G L G Y P  
UniRef90\_C6RED8 H P Q M F V R H Q A F R E D P D L E P L L G T P S S G L I E I Y S K T I I A D M Q Y D  
UniRef90\_G5S313 V M D T T F F G A F R A D P Q A H P L L G T P S S G R I E I L Y S E T I I A G F G Y P  
UniRef90\_Q47T39 G P D D G G N L R A F R A D P P L A S P L L E T P S S G K I E I F S E T I I A S F G E A  
UniRef90\_B8IXP8 A F E E W I R H A D F I E D P L L N A L L G T D S S G L I E I Y S Q S I I A K Y N Y E  
UniRef90\_F8KTB6 A D P Q T G S F M L R D D P P E R H P L L R D T P S S G K I E I L S S A T I A E F G Y D  
UniRef90\_L0IWD6 E K D F V L F E D F R A D P P A S H P L L R T P S S G R I E I L S S P T I G A L S A  
UniRef90\_UPI0002EA24E1 L E A K W V R H G D F Y T D P V K N P L A T T S G K I E I L Y S S D F A K Y E L A  
UniRef90\_A6FCL9 V K D G G R M I N A F R A D P A A A P L L S T A S G K I E I F S A T I A S F G Y D  
UniRef90\_U4VWWW6 G K G E F V H L A D F R A D P L L Q P L L S T A S G L I E F V S P Y Y V I A G L G Y D  
UniRef90\_Q21BK3 F S D S K Q T L E R F R E D P V L G N P L L N T P S S G K I E I F S E T I I A G F G Y D  
UniRef90\_J3DW88 K G K D W T R Q A D F R E D P E L N A L L G T P S S G F I E I F S R K I I D R Y G Y K  
UniRef90\_UPI000378066B K G S T F V R H A L F R E D P E L N P L L G T P S S G F I E I T S R K I I D G F G Y E  
UniRef90\_R11I48 T E D D L I L F G D F R A D P V N F P L L A T P S S G R I E I F S A D I I D G F G Y D  
UniRef90\_Q0S1F3 G P D D D Q V L Y D R F R A A P D A H P L L S T P S S G R I E I L F S Q R S V A D S F G Y A  
UniRef90\_UPI000345ECFD P D R P Q I L L Q A F R D N P E L A P L L S T P S S G R I E I L F S Q R S V A D S F G Y A  
UniRef90\_UPI000465E30C P D V P Q I L L K A F R D D P E A A P L L S T P S S G K I E I L F S A A V A A F G Y R  
UniRef90\_Q50569 D E T H P G T P L L H T E Q F A T P D G L G I F F P V I E Y R E P A E T  
UniRef90\_Q0B8S8 D A R T V L L D A F R R D P V A H A L A T A S G K I E I H S R V I E Q F G Y D  
UniRef90\_UPI0003650AF3 E R V Q L L A D F R A D P E R H A L P T P S S G R I E I H S R R I E A M G L A  
UniRef90\_A3CUC8 T E E H P G T P L L H R E K F S S A D G L G H F F G I E H R P A E V  
UniRef90\_A4TCP1 T D D G L T L L A D F R A D P S A H P L A T P S S G R I E I F S A D I I D S F G Y D  
UniRef90\_T1XLC0 R D D D G G M L R A F R N D P T G A P L P T P S S G K V Q V S S P A V A A F G Y A  
UniRef90\_L8DP0U T E D D L T F F E D F R R D P A G S A L R T P S S G K I E I F S D T V A G F D Y E  
UniRef90\_A6GL11 H E G D P G Q P V V F T E H F P T P S S G K A R L V P A Q F R Q A A E T  
UniRef90\_Q5U9M0 R G Q R E R L G E A L R R D P D A N P L D T P S S G R I E I F S S T I D G F G Y A  
UniRef90\_A6UJU1 T E D S K G T P L L H T E K F L T P D G L G K L F A L E Y G E A M E P  
UniRef90\_I0DXJ1 P H T Q N V A F E K N I Q D F E N N P F P T P S S G K I E I F S K R L Y D M H N P  
UniRef90\_B6YU84 S E D H P G T P R L H V I E R F A T P D G K A N I I P V I E F K P P A E E  
UniRef90\_UPI0003723EA0 V E D E A L L G E F R E D P E A D P L R T P S S G R I E I L Y S Q T I A S F  
UniRef90\_H4FBT1 R P D Q P F M A D F R T D P D A H P L R T P S S G R I E L A S A Q I A G F G Y T  
UniRef90\_F5XWM5 S E D D P G Q P I V I F T E R F P T D G R V R L V P A Q L V A A D E R  
UniRef90\_I8T8J0 R T A A D A R H L Q A F A D G R F Y H A D G L A R F P T P A R A P A N A  
UniRef90\_UPI0003473D2E A D T Q G A A R R Y T D G V F A T A D G R A R F H A P R Y Q P V A E P  
UniRef90\_K2RWB5 D E E H P G T P I L H A E K F A T P D G L G V F K A I E F K P P A E N  
UniRef90\_A0A011Q7D9 E G S S Q G R Q R L Y E D G V F A T P D G R A R F V Q V I E H Q P T A E S  
UniRef90\_D6CKF7 T P Q D P G Q P I V I F A D R F P T A D G R V K L V P A D I I P A S E R  
UniRef90\_P18775 Q G H H V A Y K A F R E D P Q A N P L T T P S S G K I E I Y S Q A L A D I A I D  
UniRef90\_Q5P7E5 K A A N V V D A A N R T R L Y A D G R F P T A D G R A H F V V P T Q A L T A E R  
UniRef90\_Q9X6B6 P A G H H V A Y H D F R T D P V A N P L S T P S S G K I E I Y S A A L A E L A I D  
UniRef90\_UPI00036ACD0D S A D G P G T E I L L F A Q G F P T A S S G R G K L V I S T A L V D P A E L  
UniRef90\_UPI00046ABAE1 A G A S Q G T P R L Y G D G R F P T D N G R A R F H A D P Y R A P K E K  
UniRef90\_UPI0003AA4AAF G A T Q S G T A R L Y A N N H P T E D G R A R F I A E S Y L P H K E Q  
UniRef90\_I3BU76 A D G K G T Q R L F A D G R F F T A S G K A Q F I S V I E P R L P Q S V  
UniRef90\_D8JV94 V G K E P S L R L F A D G R F F T R D G K A R F T S L D L E A N P R R T T  
UniRef90\_T0K2G7 D P N G P D T Y R Y A A Y D P Q F Y G K P D G R A V I F A R P H A N P Q E M  
UniRef90\_I0GC96 E G E V P G E R F F A A G G F F T N D G K G R F V A P E V P S L R G E  
UniRef90\_N6Y268 S A A E P S Q P V L F E Q T F P T A S G R G R F V P V I S P L P A A E L  
UniRef90\_N0AZI7 Y D E P L I G Y K A Q I D D L E K N P F K T P S S G K I E I L F S K V L W D M H E  
UniRef90\_R118E8 R E H H T L F A D F R A D P V A H P L R T P S S G R I E I T S A T V A G F G Y P  
UniRef90\_UPI00022607A8 A G D T Q P R H P I R Y L V P D S D R F A T A D G K A V F A R P W M R P E E W P  
UniRef90\_C4KAJ6 A E D A P G K D R V F D D R F P T A S G R A R F R P T V P L P D E W P  
UniRef90\_UPI000381ABCB A N R S E P L F P G K L P T P S S G K I E I L Y S K R M L A D G H P  
UniRef90\_UPI00035C7D51 T E S P E G T A R M F A D G H F F T P S S G R A R L L  
UniRef90\_A0KL58 T E D H P G T S T L F E G N V F T T P S S G K G Q L I A S E W R P P L E Q  
UniRef90\_L1KT98 D P D R P G E A K L Y K E R F A T P D G K A R L I A A P Y L P P G E Q  
UniRef90\_U1ANQ4 A G Q A E G Q A R R Y V D G V F A T D D G K A R F H A I D Y R P P A D K  
UniRef90\_H4I2Q2 S A D D P G Q A I V F G D G F P R P E G R A K F T P A A I V A P D D V  
UniRef90\_A9DXY1 E G A A S G K V R L Y E D G I Y P T P D G R A R F A A H A W Q P V A E P  
UniRef90\_J0K5Z1 A T M R A A G A A G S V R L Y A D G R F P T A S G R A R F V V P V Q A S T A E Q  
UniRef90\_N6XCB6 K A D D P G T P Y L Y E D G F N F A D D K A R F V P A D L G E P N E L  
UniRef90\_UPI000378A0E2 D A G A V N T A K R L Y T D G R F E T V D G L A N F I N V M Y R P V A E P  
UniRef90\_W0JVE1 A G H Y V A Y K A F R D D P V K N P L K T P S S G K I E I Y S E A L A K V P D D  
UniRef90\_UPI000367A3E5 A G A Q T G K A R L Y E D G V F P T P D G R A R F S A T A Y Q P V A E S  
UniRef90\_C6C7U9 K S E P Y V A F A D N I R D P E N H P F A T P S S G K I E I F S K R L Y D M H H P  
UniRef90\_UPI00036A03F4 R L R W A G E P E A P F Q P F A D G G F G T P S S G K G E L F S A A L A E Q G L D  
UniRef90\_H5V2C7 UniRef90\_UPI0003681363

QUERY D C P A H P T W M E P A  
 UniRef90\_M1F8G0 D C P P H P T W M E P  
 UniRef90\_UPI00016A6E59 D C P P H P T W M E P  
 UniRef90\_A0A011P634 D C Q G H P M W L E  
 UniRef90\_Q7VHL6 Q C P P H P T W L E P  
 UniRef90\_M4R9F6 D C K G H P T W F V P  
 UniRef90\_L0MH18 D C R G L P S W M P P  
 UniRef90\_C5ALG0 D C P P H P T W L E P  
 UniRef90\_B9KDY6 D C K A H P T W M E P  
 UniRef90\_E7H0D2 D A P A H P T W L P P  
 UniRef90\_M8AIF1 D C K G H P R W Y P P  
 UniRef90\_Q6LS20 D C Q G H P M W F E  
 UniRef90\_UPI0004000F92 D C P G H P V W F E P A  
 UniRef90\_W71PV9 D C A G H P R W Y E P A  
 UniRef90\_D6DP24 D C P P H P A W L E P  
 UniRef90\_C6AN27 D C K G H P M W F E K A  
 UniRef90\_B9D3R1 D C P P M P T W L E P  
 UniRef90\_Q7M863 E C K G H P S W M E P  
 UniRef90\_D4E287 D F A P H P Q W Q P P  
 UniRef90\_M5F713 D C P G H A V W R E P  
 UniRef90\_R7C0S5 D C P G Y P A F L  
 UniRef90\_A3K4Z0 D C P G H P V W L P P S  
 UniRef90\_A8I2H2 D C P G H P T W L P  
 UniRef90\_C1DG74 D C P G H P V W F E  
 UniRef90\_C6RED8 D C P P Y A T W M E P  
 UniRef90\_G5S313 D C Q G H P M W F E  
 UniRef90\_Q47T39 D C P G H P T W L D P  
 UniRef90\_B8IXP8 D C P G H P A W L  
 UniRef90\_F8KTB6 D C K P H P T W F E P  
 UniRef90\_L0IWD6 D C P A H P K W L E P  
 UniRef90\_UPI0002EA24E1 D C G T H P H W Q P P  
 UniRef90\_A6FCL9 D C P P L P T F F P P  
 UniRef90\_U4VWW6 N C P G H P V W R E P  
 UniRef90\_Q21BK3 D C P A H P T W L E P  
 UniRef90\_J3DW88 D C V G H P A W Y E  
 UniRef90\_UPI000378066B E C Q G H P M W F E K S  
 UniRef90\_R1I148 Y C Q E H P M W F E K A  
 UniRef90\_Q0S1F3 D C A G H P R W Y E P  
 UniRef90\_UPI0002378936 D C P G H P T W L V P  
 UniRef90\_UPI000345ECFD E C P G H P Y W H Q P  
 UniRef90\_UPI000465E30C E A P G H A Y W  
 UniRef90\_Q50569 P D S E Y P F  
 UniRef90\_Q0B8S8 D C P A H P A W L E P  
 UniRef90\_UPI0003650AF3 D C P P H P Q W L A P A  
 UniRef90\_A3CUC8 A D A E Y P F  
 UniRef90\_A4TCP1 D C R G H P A W F E P  
 UniRef90\_T1XLC0 D C P G H P A W L A P  
 UniRef90\_L8DPU0 D C R G H P M W F E P  
 UniRef90\_A6GL11 P D T E F P F  
 UniRef90\_Q5U9M0 D C P G H P M W L E P  
 UniRef90\_A6UUJ1 P D E E Y P M  
 UniRef90\_I0DXJ1 D L P A L S H Y V P  
 UniRef90\_B6YU84 P D E E Y P F  
 UniRef90\_UPI0003723EA0  
 UniRef90\_H4FBT1 D C P G H P A W L E P  
 UniRef90\_F5XWM5 P D G E F P  
 UniRef90\_I8T8J0 V D A D Y P  
 UniRef90\_UPI0003473D2E T D A R F P F  
 UniRef90\_K2RWB5 P D D E Y P F  
 UniRef90\_A0A011Q7D9  
 UniRef90\_D6CKF7 P D A E F P  
 UniRef90\_P18775 P L P L Y T P G F E  
 UniRef90\_Q5P7E5 A D A R Y P L H L  
 UniRef90\_Q9X6B6 P L P V Y A A G F E  
 UniRef90\_UPI00036ACD0D P N E E F P  
 UniRef90\_UPI00046ABAE1 R E A R F P  
 UniRef90\_UPI0003AA4AAF R D A R F P  
 UniRef90\_I3BUT6 R S A G Y P F  
 UniRef90\_D8JV94 P A A Y P M  
 UniRef90\_T0K2G7 P D A E Y P F Y L  
 UniRef90\_I0GC96 T G P S R P  
 UniRef90\_N6Y268 P D D D Y P M  
 UniRef90\_N0AZI7 E L P A L A K Y L P  
 UniRef90\_R1I8E8 D C P G H P V W L P P S  
 UniRef90\_UPI00022607A8 P D D E F P F  
 UniRef90\_C4KAJ6 V D A A W P T  
 UniRef90\_UPI000381ABCB P L P T Y P L D E E P  
 UniRef90\_UPI00035C7D51  
 UniRef90\_A0KL58 P C A E Y P  
 UniRef90\_L1KT98 P D D D Y P  
 UniRef90\_U1ANQ4 L S A H Y P F  
 UniRef90\_H4I2Q2  
 UniRef90\_A9DXY1 P D A D Y P M  
 UniRef90\_J0K5Z1 R E S R Y P F  
 UniRef90\_N6XCB6 V D A R Y P L H L  
 UniRef90\_UPI000378A0E2 P L P T Y T P  
 UniRef90\_W0JVE1 P D E E Y P  
 UniRef90\_UPI000367A3E5 T D A T Y P  
 UniRef90\_C6C7U9 V T S P L P V Y  
 UniRef90\_UPI00036A03F4 R D E R Y P F  
 UniRef90\_H5V2C7 E L P A L S H Y V P  
 UniRef90\_UPI0003681363 P L P S F K P A K E



UniRef90\_C9Y3U7  
UniRef90\_B8FZB3  
UniRef90\_UPI00035FC605  
UniRef90\_F4B6H4  
UniRef90\_A4SXX4  
UniRef90\_UPI0003A65002  
UniRef90\_UPI0003F92519  
UniRef90\_UPI000477B9E2  
UniRef90\_D1C157  
UniRef90\_A5V706  
UniRef90\_F7Z050  
UniRef90\_D1YYX0  
UniRef90\_UPI00035CAE63  
UniRef90\_Q46C84  
UniRef90\_K8W5J3  
UniRef90\_I4MR76  
UniRef90\_B4DAA9  
UniRef90\_UPI00036DAD38  
UniRef90\_Q7X2P6  
UniRef90\_Q1J2V5  
UniRef90\_F9MUL1  
UniRef90\_UPI00037180DF  
UniRef90\_B4V884  
UniRef90\_I4YRW6  
UniRef90\_D1A3S4  
UniRef90\_B8G227  
UniRef90\_UPI00030A2AE5  
UniRef90\_UPI00040B7E24  
UniRef90\_E3G7Z4  
UniRef90\_C8VNB2  
UniRef90\_A0A059DP53  
UniRef90\_D1AGJ3  
UniRef90\_UPI0004647760  
UniRef90\_A9BF64  
UniRef90\_A4TRR7  
UniRef90\_C8WL81  
UniRef90\_E8V3P9  
UniRef90\_S3UPY0  
UniRef90\_UPI00047E1F31  
UniRef90\_L0M2U9  
UniRef90\_W0UJZ78  
UniRef90\_H0HZM8  
UniRef90\_UPI0002556D6A  
UniRef90\_I0XN62  
UniRef90\_G8ND99  
UniRef90\_Q023D2  
UniRef90\_C7Q4T2  
UniRef90\_A7K229  
UniRef90\_UPI000375BFEE  
UniRef90\_Q2WB01  
UniRef90\_UPI00047C0F8E  
UniRef90\_I9BRR1  
UniRef90\_D4E3Y4  
UniRef90\_UPI00037ABB99  
UniRef90\_M3UJP4  
UniRef90\_UPI00046706E7  
UniRef90\_UPI00035DF04C  
UniRef90\_C8WK53  
UniRef90\_M3EW38  
UniRef90\_A0LNF8  
UniRef90\_M7D1T9  
UniRef90\_W6LV86  
UniRef90\_I0XU44  
UniRef90\_H8IT28  
UniRef90\_H6LB59  
UniRef90\_Q087B8  
UniRef90\_W1NP9V0  
UniRef90\_I2JPF1  
UniRef90\_A9I094  
UniRef90\_K8GNM6  
UniRef90\_R4KEZ4  
UniRef90\_G0HJD4  
UniRef90\_UPI00047CD7BB  
UniRef90\_W0JJ08  
UniRef90\_K9DA51  
UniRef90\_UPI0003B55465  
UniRef90\_A0LP28  
UniRef90\_A0A031LS37  
UniRef90\_I9BST8  
UniRef90\_Q1LDU3  
UniRef90\_Q51328  
UniRef90\_A3W033  
UniRef90\_I4Z4S7  
UniRef90\_A0A015M5C6  
UniRef90\_B4EZ02  
UniRef90\_UPI000370A4D6  
UniRef90\_UPI00040D2EAB  
UniRef90\_V6MBL6  
UniRef90\_Q1ZA48  
UniRef90\_D9TEZ9  
UniRef90\_B4WQJ0  
UniRef90\_A7IL15

UniRef90\_C9Y3U7 G Y R Q F V Y H P D R L K Y P M K R V G 50 60 70 80 K R G E G Q F E R  
UniRef90\_B8FZB3 T Q R Q R L Y H P D R L K Y P M K R V G E R G S G E W A R R  
UniRef90\_UPI00035FC605 F G W D F V N D P D R L L K K P L I K E N G D K F F R E  
UniRef90\_F4B6H4 F G W D F V N S P D R L L T K P L I R E G D R G F R E  
UniRef90\_A4SXX4 S K G S T L H L T A N P S L Q M Q A R L G S P A L R K A R G E D P V D  
UniRef90\_UPI0003A65002 S K A E T I D L D G R V L H P Q I K D G R R  
UniRef90\_UPI0003F92519 N K V R R I Y D P K R V K T P L K R I G E K G E G K F A P  
UniRef90\_UPI000477B9E2 S F R K R V Y N P D R L V K Y P M K R V G K R G E G R F E R  
UniRef90\_D1C157 P K Y Q Q V N H S D R L L T Y P M I R R G G K G S R L E R  
UniRef90\_A5V706 S K G T H L G L A G R L L H P M I G D R R  
UniRef90\_F7Z050 F G W D F V N S D K R L L T K P L V R K D G K F V E  
UniRef90\_D1YYX0 P K G R Y L H R P D R L L T K P L I K K D G K F V E  
UniRef90\_UPI00035CAE63 V K G R F G Y S N E R L L T K P L I R R D D A P K R G D L D M F M K L E D V F R E  
UniRef90\_Q46C84 Q K G R Y I H S K D R L V K P L V R E N G K L V E  
UniRef90\_K8W5J3 S I R R R M N H S P D R L L K Y P M K R V G K R G E G K F V R  
UniRef90\_I4MR76 V K F D Y A H S P E R L L T R P L I R R A D A P K D P T A L E R R D R W K E L F R E  
UniRef90\_B4DAA9 P K G V L R Y H P D R L L S P L I R T E D G F R A  
UniRef90\_UPI00036DAD38 V K F D Y I H H P H R L L T K P L I R L A N A K K D P N D Q D P A N P W T H F R R  
UniRef90\_Q7X2P6 S K G T H L G L E G R L L H P M I G D R R  
UniRef90\_Q1J2V5 F G W D Y V N S E K R L L T T P L I R E N G A F R P  
UniRef90\_F9MUL1 F G Y K F L N N P D R L L K T P L I K K D G K F V E  
UniRef90\_UPI00037180DF F A L G Y A T H K D R I L K P M V R S K L S D P W R E  
UniRef90\_B4V884 T K G A T L A A P G R L L T A L L R A E R D E E P R P  
UniRef90\_I4YRW6 S K G E T L S L D D R L L T Y P E I E G H R  
UniRef90\_D1A3S4 Q K G W T L T V P D R L L T P L M R A H L G A P L E P  
UniRef90\_B8G227 A K G Y Y L T H S E R V T T K P L I R K N G K L E P  
UniRef90\_UPI00030A2AE5 G Y R R R H I Y S P D R I L K K P L K R V G K R G E G K F K E  
UniRef90\_UPI00040B7E24 N K P E R L Y D G K R L Q H P L K R I G K G S G K F K R  
UniRef90\_E3G7Z4 S I R R R L N H P E R L L N Y P M K R V G K R G E G K F E R  
UniRef90\_C8VN82 L K G M Y G Y D D T K I L T P R I Y H P M L R R T K G A P L E R  
UniRef90\_A0A059DP53 S K G T S L G D S E R V L F P K I A G R R  
UniRef90\_D1AGJ3 F A Y N F V N H K D R L L K T P L I K K D G L F V E  
UniRef90\_UPI0004647760 S I R R R I N H P D R L L N Y P M K R V G A R G E G K F V R  
UniRef90\_A9BF64 F G Y D F V N H P D R L L T D P L I K R N G H F E K  
UniRef90\_A4TRR7 L K G Y Y G W D D T R L L T P R L T T P L L R R Q R G E A F Q P  
UniRef90\_C8WL81 S I R R W I N H P D R L L S Y P M K R V G K R G E G K F E Q  
UniRef90\_E8V3P9 G Y L D R V I Y S P D R L L Y P M R R R A D A A K G S L S H G H E A E A F E R  
UniRef90\_S3UPY0 S K G M N L H Y S D R L L L F P M V R P D R F S P L E R  
UniRef90\_UPI00047E1F31 P K G V T A Y H A D R I L K P L I R D D A S L K G T Q E G F R E  
UniRef90\_L0M2U9 L K G Y Y G W D T P R L L T Q P M I R Y E K G G K L T P  
UniRef90\_W0UJZ78 T K V E R T Y H A E R L L Y P L R R I G K K G E G K F E R  
UniRef90\_H0HZM8 S K A E T L G L E E R L L H P E I G G R R  
UniRef90\_UPI0002556D6A F A W G Y A T H P D R L L T K P M I R K H L G D P W Q E  
UniRef90\_I0XN62 S K G M N L H Y S V M D R S D R L L L F P M M R T D R F A P L K R  
UniRef90\_G8ND99 F G L D F P F S G K R L L Y P M L R E G K G R P L R R  
UniRef90\_Q023D2 P K G V K R Y H P D R L L D P L M R T P E G F R P  
UniRef90\_C7Q4T2 T K G A T L A A P G R L L T R P L L R A D R G A E P E A  
UniRef90\_A7K229 V K F D F L S S E E R L L T T P L I R K D G W L Q P  
UniRef90\_UPI000375BFEE T K G S S A H V A L R N A G R L E R A F V R D A R E R D P A P  
UniRef90\_Q2WB01 F G F D Y S R H P Q R L T V P L I R K E G A P K E P L D P A D P F T H F R P  
UniRef90\_UPI00047C0F8E T K G S T L H L Q A R L L H P M Q R V I R G E A P A A  
UniRef90\_I9BRR1 T Y P E R V Y H P D R L L T P R K R V G P K G A G Q F V D  
UniRef90\_D4E3Y4  
UniRef90\_UPI00037ABB99 P K G W E L E S D D R A T T P M L R K Q R G G E L E A  
UniRef90\_M3UJP4 T K G S T L A A P G R L T S A F V R P D R L S E R A A V T T D A A V A E A R R  
UniRef90\_UPI00046706E7 T K G K T A H S A G R L E T A M V R R E A D V V P  
UniRef90\_UPI00035DF04C F A W G Y A T H P D R I T T P M I R E R I T D A W R E  
UniRef90\_C8WK53 A S F D F V D A P D R I R T P L V K N R E T G E F E P  
UniRef90\_M3EW38 T K G A T L A A P G R L L T A L V R D D R G E E P V P  
UniRef90\_A0LNF8 A K G S A L Q D H E R L R H P M I R T G P R G S G Q W R R  
UniRef90\_M7D1T9 F A F G Y A T H K D R I R E P M I R D S I N E P W R T  
UniRef90\_W6LV86 S K G E T L S L D D R L L Y P E I H G R R  
UniRef90\_I0XU44 S K G M N L H H S D R L L H P M V R N P K T G E L Q K A  
UniRef90\_H8IT28 T K G A T T A D M L G A P G R M D S A Y V R T D R G E P L Q A  
UniRef90\_H6LB59 L K G H Y G W D Y L N D P Q I L T K R L T K P Q I R K N G K L E D  
UniRef90\_Q087B8 V K F D F L N S P K R L L T T P L I R K N G Q L Q P  
UniRef90\_W1N9V0 F A F G Y A T H P D R L L T T P M I R D S I D Q P W R E  
UniRef90\_I2JPF1 I K G I F E H S A G R G V E P L I R N K I Y D A F Q P  
UniRef90\_A9I094 F A W G Y A T H K E R V L K P M I R K R L T D P W R E  
UniRef90\_K8GNM6 V K G A T V A D K S R L L C P M W R E R L D Q P F Q R  
UniRef90\_R4KEZ4 A G V C L L N D Q E R V K K P L I R T G P R G S G Q W R E  
UniRef90\_G0HJD4 H A T E F V L S G D R L K R P L I K R E G S K M R P  
UniRef90\_UPI00047CD7BB S K G S A L A L D G R L L H P E I H G R R  
UniRef90\_W0JJ08 A K G Q T L Y D D N R L L K T P L I R V G E R G E G K W K K  
UniRef90\_K9DA51 A L G E T L G L D G R L L H P A V R R D G A M A R  
UniRef90\_UPI0003B55465 P K G A H L N H D G R L A Y P M I R D R R G E Q P R E  
UniRef90\_A0LP28 V K Y D F I Y S E D R L K T P L I K S N D G F R E  
UniRef90\_A0A031LS37 F G W G F V N S P E R L L K H P L I R Y N N E F K Q  
UniRef90\_I9BST8 F A W G Y A T H A D R I T S P M I R A S I D E P W R E  
UniRef90\_Q1LDU3 A L G E T L D L N G R L L H P Q V R D A D G S L R R  
UniRef90\_Q51328 V K G A T I A H K D R L L Y P M M R E S L D K P F R R  
UniRef90\_A3W033 S K G S A L G E T V G L G H R L L T P R V A G K H  
UniRef90\_I4Z4S7 F A W G Y A T H K D R I T R P M I R E R I T D P W R E  
UniRef90\_A0A015M5C6 F G W D F V N S E E R L L T K P L I R Q G D R F V E  
UniRef90\_B4EZ02 S V R W K T Y N P D R L L K Y P M K R V G K R G E G K F E R  
UniRef90\_UPI000370A4D6 T K G A T H A E L M R A P G R M T T A H R R D A R G Q A A V P  
UniRef90\_UPI00040D2EAB F G F D Y V N S E E R L L T N P L I R E G D Y F R E  
UniRef90\_V6MBL6 F G W D F V N S D Q R L L T T P L I R K G D E F V P  
UniRef90\_Q1ZA48 A I H K R T F S P D R L L K Y P M R R I G K R G E G K F E R  
UniRef90\_D9TEZ9 Q K G W T L D H P D R L L T T P L I H D R P G G E L R P P  
UniRef90\_B4WQJ0 I K G A S I G D R D R L L K A P M M R D S L D Q P L Q P  
UniRef90\_A7IL15 V K G R F A Y H Q D R I L K P M I R S S L H E P W K E

UniRef90\_C9Y3U7 I S W D E A T T T L I A D N L R R I I T A 100 K Y G P A S R F M H T D T A V S G G A F  
UniRef90\_B8FZB3 I S W E E A F D T T A K E L R R E I I D Q Y G N E D S V Y F N Y A C G T A Y G L N Q T  
UniRef90\_UPI00035FC605 A T W Q E A I E N L I I A N K L K E K E K Y G P P D S I G F I A N S C T G M T N E E E A Y  
UniRef90\_F4B6H4 A S W D E A I L E Y I I A R K K L K E V K E Y G P P D S I G F I A N S C T G M T N E E E A Y  
UniRef90\_A4SXX4 I S W P E A I Q T V A Q K F A S E I I Q E H G S D S V G I Y V S G Q Q L L T E D D Y Y  
UniRef90\_UPI0003A65002 A D W D E A L D L V A T Q R F F A S E I I A E D G P P E S I L P Y S F Y G N M G L I  
UniRef90\_UPI0003F92519 I S W E E A L R A I T D H F W K L I A E D G P P E S I L P Y S F Y G N M G L I  
UniRef90\_UPI000477B9E2 I S W D E A F D T I A D N L K R E I K K E Y G N E A I Y L N Y C T G T L G G T W P  
UniRef90\_D1C157 A S W D E A L D D Y V V A R R W R E I Q A R H G R D S V A V Y S G S S Q M T N E K C Y  
UniRef90\_A5V706 A G W D K A L D L V A R R F R E T I J A R H G P D S V A F Y V S G S Q L L T E D D Y Y  
UniRef90\_F7Z050 T S W D E A L S V V A S R R L K E I H S Q Y G K D S V G F I S S S K V T N E E E N Y  
UniRef90\_D1YYX0 A T W D E A Y D L V A K K F L K S F K P E E S V M C L S S A R T V S N E E E A Y  
UniRef90\_UPI00035CAE63 A T W E E A M A K S A E G L M A I E K E Y G G D A L S G F G S A K G V S N E E E A Y  
UniRef90\_Q46C84 T S W E E A L A L T I A G K F M T F L G P E E I A C L S S A T A R T S N E E E N Y  
UniRef90\_K8W5J3 I S W E E A L D T V G S S L R F D T L K N Y G N E A A V H V L Y G P V J A G V D G S A N I T  
UniRef90\_I4MR76 A S W D E A L D A A A A A G F R A A L T A T A A R G R A S P V J A G F G S A K G  
UniRef90\_B4DAA9 A G W Y E S L N K T A D S L K A I Q D K H G K D A L A F L G G A S M T N E S E K A Y  
UniRef90\_UPI00036DAD38 A S W E E A L D A A A N G L K K I L R D E K P P K A L A G F G S A K G S N E E E A Y  
UniRef90\_Q7X2P6 A S W D K A L D L V A R R F R E T I J A R H G P D S V A F Y V S G Q L L T E D D Y Y  
UniRef90\_Q1J2V5 A S W D E A L G L I A R R F R E I J A Q H H G P D A L G F I A S S K C T N E E E A W  
UniRef90\_F9MUL1 A S W D E A Y A L L K K F H E N M E N G P K A F A G F S S A R T T N E E E N Y  
UniRef90\_UPI00037180DF V S W E E A I A H A S E F K R I Q A K E Y G R D S I G G I T S S R G T N E E E T Y  
UniRef90\_B4V884 V S A D D A I A E T A R R L R A V V D E H G P D A I A F Y V S G Q M S L E A Q Y  
UniRef90\_I4YRW6 T G W D K A L D L V A R R F M E T M A E Y G P D A V A I Y G S G G L L T E D D Y Y  
UniRef90\_D1A3S4 C T W E E A L E R I T A E I T R L Q E R H G P D A V G V F G G G L L T N E K A Y  
UniRef90\_B8G227 C T W D E A M E L V T A K F K E S I A N N G P D S V A F Y G S G Q Q L A E E G Y  
UniRef90\_UPI00030A2AE5 I T S W D E A I K L I A K E N N R I K E K Y G P A S R E S L Y A T G Q T G Q I G  
UniRef90\_UPI00040B7E24 I T W D Q A I E E I I G R W K E L I J A Y E G A E S I L P Y S F Y G N M G N L  
UniRef90\_E3G7Z4 I S W Q E A L D T L S G D L Q R I L V R Q Y G N E A V Y I N Y S S G V G G N I T  
UniRef90\_C8VN82 V T W D E A L D F T A E R L R A I L S E E H G A E S V M L T G S S R G A G N E A N  
UniRef90\_A0A059DP53 A E W G D A I R S V A K G F A D T I S Q Y G P E S V A L Y V S G Q I L L T E D D Y Y  
UniRef90\_D1AGJ3 S S F D E A I T F I A E K L T N I K K I Y G R E S I A G L T S A R C T N E E E N Y  
UniRef90\_UPI0004647760 I S W D E A L N L V T D S L K N V V A Q Y G N E A V Y I N Y T S A R V V G G N I T  
UniRef90\_A9BF64 V S W E E A L D L V A E K L N I R G K Y G S D S V I G L S S A K C T N E E E N Y  
UniRef90\_A4TRR7 V S W E A A I A F I T A K L S A I K E R H G P D A I M M T G S S R G P N E A N Y  
UniRef90\_C8WL81 I S W D E A Y D L I A D N Y Q R I L D E Y G P E S V W N H Y A S G V N A S N  
UniRef90\_E8V3P9 I S W D E A L D T I A K N L Q R V T D Q Y G P E S V L P Y S Y A G T I G K L  
UniRef90\_S3UPY0 V T W N S A L N K A A A E F K R Y I K E F G P D S V L G F Y V S G Q L L T E E Y Y  
UniRef90\_UPI00047E1F31 A T W E E A Y D L T A K K F T E L Q G K Y G K D T L S V F S G V S M T N E K C Y  
UniRef90\_L0M2U9 V S W D E A L D S Y T A K R L G E I I K A K F G P R A L M T T G S S R G T N E T N Y  
UniRef90\_W0UJZ78 I S W D E A L D T T I A A R L K A V A A R S P Q A L L P Y S Y C G T M G L V  
UniRef90\_H0HZM8 A G W D E A L D L V A S T F T S T I A E H G D S V A F Y V S G Q L L T E D D Y Y  
UniRef90\_UPI0002556D6A V S W D E A V N Y A S E L R R I L Q L K Y G R D S V I G G I T S S R C T N E E E Y  
UniRef90\_I0XN62 T S W D K A L D L A A E K F K S F I R D F G P D S V G F Y V S G Q L L T E E E Y  
UniRef90\_G8ND99 A T W E E A L D Y A A S R L L E V L R R Q G P E A L A V F P S A K T T N E E V Y  
UniRef90\_Q023D2 A K W D E A L D F T A S R R L R E L Q E K Y G K D S V A V Y G G A S L T T E K S Y  
UniRef90\_C7Q4T2 A G M D D A I A E T A R R L R A I L D E H G P D A L A F Y V S G Q M S L E A Q Y  
UniRef90\_A7K229 A S W D E A I Q L V A S K L S T I L K Q D H G N D A L A G F S S A K T T N E D N Y  
UniRef90\_UPI000375BFEE V P I A D A I A E T A R R L R A T L D D A F G P D A L A F Y V S G Q M S L E A Q Y  
UniRef90\_Q2WB01 A S W D E A L D A A A A A G L K R L P A S A L A G L G S A K G S  
UniRef90\_UPI00047C0F8E I G W D A A L D L A A G K F A Q V I E A H G P D A V G F Y V S G Q L L T E D D Y  
UniRef90\_I9BRR1 I S W D E A L D L A A T R L K A I A A R A P E A I L P Y S Y A G T M G L V  
UniRef90\_D4E3Y4  
UniRef90\_UPI00037ABB99 V S W E E A M E T F C G R F K E I I Q A E H H G P E S S V A F I S T G Q L V A E E M A  
UniRef90\_M3UJP4 L S S V A V Y V S G Q M S M E A Q Y  
UniRef90\_UPI00046706E7 A S I E S A I T E T A K R L R A I A D R H H G P D A I A L Y V S G Q M S M E A Q Y  
UniRef90\_UPI00035DF04C V S W E E A L D F A A G R L R G I Q A E H H G R G S A G A G A I C S S R C T N E E D Y  
UniRef90\_C8WK53 A T W D E A L D L V A R R F R E L R D R V H H G G S L A A F A C S S R S T N E E D I Y  
UniRef90\_M3EW38 A P V R D A I A A T A R R L R A I I D E H H G P D A F A F Y V S G Q M S L E A Q Y  
UniRef90\_A0LNF8 A S W D E A L D F V A D R L R G I L D E R H G A H S I L W G E R T N L N T H I S K  
UniRef90\_M7D1T9 V S W D E A I G F A A K R L K D T Q A K Y G R E S I G G I T S S R C T N E E E T Y  
UniRef90\_W6LV86 A T W D E A L D A V A A G F R N A L A E H G P D A I A F Y V S G Q L L T E D D Y Y  
UniRef90\_I0XU44 T D W D S A L G E I A S R F K N I L K E Y G P D S V G F Y V S G Q L L T E E E Y  
UniRef90\_H8IT28 I D T D Q A I T Q C A R R L R A I I D E H H G A D A F A M Y V S G Q M S L E A Q Y  
UniRef90\_H6LB59 V E W D E A I S Y T A Q R L S E I K T K Y G S D S I G T G C A R G S N E A N Y  
UniRef90\_Q087B8 A S W S E A I S Y I A Q Q L Q P I K D A A G P S K F A A L S S A K C T N E E E N Y  
UniRef90\_W1N9V0 V G W E E A I S F A A S R L K A I Q A E H G R E S I G G I T S S R C T N E E E T Y  
UniRef90\_I2JPF1 T S W D T A L D K T A A E F M R I Q E K Y G R D S V A V V S T G Q L L T E E E F Y  
UniRef90\_A9I094 V S W D E A I D Y A A S E F R R I Q A E H G R D S V I G G I T S S R C T N E E E W  
UniRef90\_K8GNM6 I T W Q E A L N H I V N Q I R T V L N E Q G A D G I C M Y G S G Q M Q T E D D Y Y  
UniRef90\_R4KEZ4 A S W E E A L D Y V A A K L R E I K D K Y G A R G I A Y T E R S S Q L N S  
UniRef90\_G0HJD4 I S W G R A I E E I A G K L R E I L R E I A E H G P D A V A F I A S S K V S N E E N Y  
UniRef90\_UPI00047CD7BB T G W N E A L D L A A S T F S Q T I A E H G P D A V A F Y V S G Q L L T E D D Y Y  
UniRef90\_W0JJ08 V S W E E A F E F A A K K F K E V I D K Y G P E T I A L E M H G T G E P G I H R  
UniRef90\_K9DA51 A G W E E A L D T V A D G F R R I I A E H H G P D A V A L Y V S G Q L L T E D D Y Y  
UniRef90\_UPI0003B55465 V S W D E A I A F T A N R L H E I Q L E H G K D A I A F Y V S G Q L D T E A S Y  
UniRef90\_A0LP28 A S W D E A L D L V A S R L K I I A K H G P D S V A G V S S A R S I N E D S Y  
UniRef90\_A0A031LS37 V N W E E A I S I L S T K L N D I R E K Y G P D S I G I A S C T D T N E E E A Y  
UniRef90\_I9BST8 V S W E E A L S H A S E L R R I Q A K H G R G A I G G I T S S R C T N E E E T Y  
UniRef90\_Q1LDU3 V D W D E A L D K V A R G F T E I J A R H G P D A V A L Y V S G Q L L T E D D Y Y  
UniRef90\_Q51328 V S W D E A L N A I V N R I Q T V R F T Q G A E A C M Y G S G Q F Q T E D D Y Y  
UniRef90\_A3W033 T D W P S A L Q L V A D R F R T I J A D H G P D S A A F Y V S G Q M L T E D D Y Y  
UniRef90\_I4Z4S7 V S W Q E A I G H A A S E F R R I Q T K Y G R D S I G G I T S S R C T N E E E T F  
UniRef90\_A0A015M5C6 A T W E E A L T L I A S R L K E I K D M H G P N S A G Y I S S S K C S N E E E N Y  
UniRef90\_B4EZ02 I S W D E A T S I I A D K L K Y T I D T Y G N E A Y Y Q Y G T G S T G A N L  
UniRef90\_UPI000370A4D6 V P V D D A I A E A A R L R A V L D E H G P D A I A F Y V S G Q L S I E A Q Y  
UniRef90\_UPI00040D2EAB A T W E E A I S Y A A K N L K R E I R T E Y G D A L G F I A S S K A T N E E A F  
UniRef90\_V6MBL6 A S W D E A L D L V A K N L L G E I K Q T Y G G N A L G F V S S S K A T N E E A Y  
UniRef90\_Q1ZA48 I S W D E A L N E V H K R L S V I D K H G N S S I F F R I G Y G K P N A P Y H  
UniRef90\_D9TEZ9 A T W D E A L D R V A A G V K D Q S I H H G P D A V A V F G S G G L T N E K A Y  
UniRef90\_B4WQJ0 V S W D E A F N R I T R E I Q Q S I A Q R G P N S I C M Y G S G Q F Q T E D D Y Y  
UniRef90\_A7IL15 V T Y E E A I A Y A S E F K R I Q E K Y G K R A V I G G I T S S R C T N E E E T Y

UniRef90\_C9Y3U7 S G D K M A R R L L N M T G G Y L E S Y H S V S M G N T A 150 A A T P Y T Y  
UniRef90\_B8FZB3 N S N S L R R L L N M T G G Y L Q S Y G N Y S Q A N Y M Y A V I P Y M F  
UniRef90\_UPI00035FC605 L A Q K L A R A V I G T N N V D N C A R Y C Q A P A T T G L F R T V G I G A D A  
UniRef90\_F4B6H4 L L Q K L A R A V I G T N N V D N S A R Y C Q S P A T V G L W R T V G L G A D A  
UniRef90\_A4SXX4 I F N K L M K G L I G S N N I D T N S R L C M S S A V A G H R R A F G A D T V P  
UniRef90\_UPI0003A65002 V A N K L M K G F I G S A N I D T N S R L C M S S S V A G H R R A F G A D T V P  
UniRef90\_UPI0003F92519 N A E G M D R R F F H R L G S S Q L D R T I C S V A G G K G Y S Y T  
UniRef90\_UPI000477B9E2 P A A T P I A R L M N C W G G Y L N H Y G D Y S T A Q T A I S L P Y M F G G S W  
UniRef90\_D1C157 L V G K F A R V A L G T R H V I D Y N G R L C M S S A A V A G Y A R A F  
UniRef90\_A5V706 V A N K L M K G F I G S A N I D T N S R L C M S S A V A G H R R A F  
UniRef90\_F7Z050 L M Q K L A R Q V F E T N N V D N C S R Y C Q S P A T D G L L R T V G M G G D S  
UniRef90\_D1YYX0 L M Q K F A R T V I K T P H V D H C A R L C H A S T V V G L A G A V F  
UniRef90\_UPI00035CAE63 L F Q K L V R Q V G T N N V D H C T R L C H A S S V A A L L E G V G S G A V S  
UniRef90\_Q46C84 L M Q K F A R A V L K T S N V D H C A R L C H S S T V A G L A A V F  
UniRef90\_K8W5J3 N S N P Y R L M N S C G G F L S R Y G S Y S T A Q I R A G M N Y L  
UniRef90\_I4MR76 T N E A Y L F Q K L V R T A F G T H N V D H C T R L C H A S S V A A L L E G L  
UniRef90\_B4DAA9 L N G K F A R I A L Q T A N I D Y N G R L C M V S A G A A N R M A F  
UniRef90\_UPI00036DAD38 L F Q K L V R T G F G S N N I D H C T R L C H A S S V A A L F E G I A S G A V S  
UniRef90\_Q7X2P6 V A N K L M K G F I G S A N I D T N S R L C M S S A V A G H R R A F  
UniRef90\_Q1J2V5 L M Q K L G R A V I G T N N I D N C S R Y C Q S P A T M G L W R T V  
UniRef90\_F9MUL1 L F Q K F I R T V F K T N N V D H C A R L C H A S T V A G L A N T L  
UniRef90\_UPI00037180DF L V I Q K L V R A G F G G T N N V D T C A R V C H S P T G Y G L A Q T L  
UniRef90\_B4V884 L A N K L A K G F V R T N Q I E S N S R L C M A S A G T G Y K L S L G A D G P P  
UniRef90\_I4YRW6 V A N K L M K G F I G A A N I D T N S R L C M A S S V A G H I R A F G S D T V P  
UniRef90\_D1A3S4 Q L I G K F A R I A L R T S Q I D Y N G R F C M S S A A A L N R A F G L D R G L  
UniRef90\_B8G227 V A N K L F K G A I G T N N I D G N P R L C M A S A A V G G F T T F G A D E P M  
UniRef90\_UPI00030A2AE5 S G D T V I Q R L L A L D G G F L G R Y S N Y S A G Q H G A A T P F T F  
UniRef90\_UPI00040B7E24 A A E G M D R R F F N R L G A S R L E R S I C N S A G A V G Y S Y T M  
UniRef90\_E3G7Z4 R S S P Y A S L V A R L M N C Y G G Y L S H Y G T Y S T A Q I A C A M P Y T Y  
UniRef90\_C8VN82 Y V M Q K F T R A C L G T N N I D N C A R T C H A A S V I G L M E V V  
UniRef90\_A0A059DP53 V A N K F A K G F L G T A N I D T N S R L C M A S S V A G H K R A F G A D T V P  
UniRef90\_D1AGJ3 L M Q K F M R A V I G T N N I D H C A R L C H A T T V S G L A E T V  
UniRef90\_UPI0004647760 P Y A S L V A R L M N C Y G G F L S H Y G T Y S T A Q I A C A M P Y T Y G T N E  
UniRef90\_A9BF64 I M Q K F M R A V I G T N N I D H C A R L C H A S T V V G L G M A F  
UniRef90\_A4TRR7 V M Q K F A R A A I G T N N I D C C A R L C H G P S V A G L Q Q T L  
UniRef90\_C8WL81 G S F L S R F L N M N G G C L G R Y G S Y S A Q L S A A L P Y L Y  
UniRef90\_E8V3P9 G Y G S M D R R F F H R M G A S Q L D R T I C S A G T E A L N L V Y  
UniRef90\_S3UPY0 I I N K L I K G F I G T N N I D T N S R L C M S S A A V S G Y K M A F  
UniRef90\_UPI00047E1F31 L T G K F A R V A L Q T R Y I D Y N G R F C M S S A A G G F L R S F G V D R G S  
UniRef90\_L0M2U9 V M Q K F A R G V L N T N N V D C C A R V C H G P S V A G L Q E A L  
UniRef90\_W0UJZ78 Q G E S M S S R F F N Q L G A S L L D R T I C A T A G A T G Y R Y T I  
UniRef90\_H0HZM8 V A N K L M K G F I G S A N I D T N S R L C M A S S V A G H R R A F G S D T V P  
UniRef90\_UPI0002556D6A L V I Q K L V R A A F G T N N V D T C A R V C H S P T G Y G L Q T L  
UniRef90\_I0XN62 I I N K L T K G F L G T N N I D T N S R L C M S S A V T G Y K M A F G E D A V P  
UniRef90\_G8ND99 L A Q K L A R V L G T H N V D H C S R L C H S S T A A L Y S R S L  
UniRef90\_Q023D2 L M G K F A R V G L G T R H V I D Y N G R L C M V S A G T A Y K T A L  
UniRef90\_C7Q4T2 L A N K L A K G F V R T S R I E S N S R L C M A S A G S G Y K L S L G A D G P P  
UniRef90\_A7K229 A F Q K F I R R E L I G T N N V D H C A R L C H A S S V T G L E A S L  
UniRef90\_UPI000375BFEE L V I N K L A K G Y V R T P H I E S N S R L C M A S A G S G Y K L S L G A D G P P  
UniRef90\_Q2WB01 N E E A Y L F Q K L V R T G F K S N N V D H C T R L C H A S S V A A L L E G I  
UniRef90\_UPI00047C0F8E A F N K L V K G L V G T N N I D T N S R L C M S S A V A G Y K R T L  
UniRef90\_I9BRR1 Q G E S M A A R F F H K L G A S L L D R T I C S A A G V A G L K Y T Y  
UniRef90\_D4E3Y4  
UniRef90\_UPI00037ABB99 F L G A L S K F G M G L K H G D G N T R Q C M A T S V V S Y K Q S F  
UniRef90\_M3UJP4 L S N K L T K G F L G T N N I E S N S R L C M A S A G T G Y K Q S L G A D G P P  
UniRef90\_UPI00046706E7 L A N K L A K G F L R T R H I E S N S R L C M A S A G S G Y K L S L G A D A P P  
UniRef90\_UPI00035DF04C L V I Q K L A R A V F G T N N V D T C A R V C H S P T G Y G L K T A F  
UniRef90\_C8WK53 L F Q K M A R V L V L Q T N N V D C C A R V U H A P T V A G L A T M L G  
UniRef90\_M3EW38 L A N K L A K G F I R T N Q I E S N S R L C M A S A G T G Y K L S L G A D G P P  
UniRef90\_A0LNF8 A F M K G I G S P N H F T H D A L C K G S V N T A F R S L  
UniRef90\_M7D1T9 L V I Q K L I R A A F G T N N T D T C A R V C H S P T G F G L K T T L  
UniRef90\_W6LV86 V A N K L M K G C F G S A N I D T N S R L C M S S A V A G H Q R A F  
UniRef90\_I0XU44 V V N K L T K G F L N T N N I D T N S R L C M S S A V V G Y K M S L  
UniRef90\_H8IT28 L A N K L T K G F I G T N Q I E S N S R L C M A S A G S G Y K L S L G A D G P P  
UniRef90\_H6LB59 V M Q K F M R A V I G T N N V D H C A R V C H A P S V S G L A Y S L  
UniRef90\_Q087B8 L M Q K F T R S I L M G T N N I D H C A R L C H S S S V A G L S D T I  
UniRef90\_W1N9V0 L V I Q K L I R A G F G T N N T D T C A R V C H S P T G Y G L K T T L  
UniRef90\_I2JPF1 T L G K L V R G V I G T N N Y D G N T T L C M A S A V S G Y K R S F G A D G P P  
UniRef90\_A9I094 L V I Q K L V R A A F G T N N V D T C A R V C H S P T G Y G L K Q T L  
UniRef90\_K8GNM6 V A Q K L L K G C L G T N N F D S N S R L C M S S A V S G Y Y Q S L  
UniRef90\_R4KEZ4 H I S K T F M R A L G S P N Y F S H D S C C K G S L N T A F R S L T G Y T D A N  
UniRef90\_G0HJD4 L L Q K I A R L F G T N N I D N C A R L C H E A S V H A L G M T V P  
UniRef90\_UPI00047CD7BB L A N K L M K G F I G S A N I D T N S R L C M A S S V A G H R R A F G S D T V P  
UniRef90\_W0JJ08 L F E V L G G T N N F A T P A Y S Q C T G S R D I G F Y Y T F  
UniRef90\_K9DA51 V A N K F M K G Y V G S A N I D T N S R L C M S S A V A G H K R A F  
UniRef90\_UPI0003B55465 I F N K L F K G F L R T N N V D T N S R L C M S S A V V G Y M Q A F  
UniRef90\_A0LP28 Q M Q K L F R T A I G T N N I D N C A R V C H A P T V A G L A K S F  
UniRef90\_A0A031LS37 L T Q K L A R A Q I I G T N N V D N C A R Y C Q S P A T V G L I R T V  
UniRef90\_I9BST8 L V I Q K L V R A V F G T N N V D T C A R V C H S P T G Y G L K Q T L  
UniRef90\_Q1LDU3 V A N K L M K G F I G T A N I D T N S R L C M S S A V A G H K R A F  
UniRef90\_Q51328 V A Q K L M K G C L G T N N F D A N S R L C M S S A V A A Y I Q S F  
UniRef90\_A3W033 I A N K L M K G F I G S A N I D T N S R L C M A S S V A G H K R A F G S D T V P  
UniRef90\_I4Z4S7 L V I Q K L V R A G F G T N N V D T C A R V C H S P T G Y G L K T T L  
UniRef90\_A0A015M5C6 V F Q K F A R A V M G S N N V D N C S R Y C Q S P A T A G L M R T V I G G D S  
UniRef90\_B4EZ02 H G R T A C K R L L S T V G G F L S D Y G T Y S Y S Q L T G L V P Y V Y  
UniRef90\_UPI000370A4D6 L A T K L A K G H L R T V H L E A N S R L C M A S A G T G Y K Q S L G A D G P P  
UniRef90\_UPI00040D2EAB L M Q K F A R Q V N G T N N I D N C S R Y C Q T P A T L G L F R T V  
UniRef90\_V6MBL6 V M Q K L A R Q V F G T N N V D N C S R Y C Q S P A S D G L M S T V  
UniRef90\_Q1ZA48 F V P R F L N S I G G H L P A H G N Y S S Y Q I D T A S A V I T Y G D K K  
UniRef90\_D9TEZ9 A L Q R F A R V I L R T R H T D Y N G R W C M S S A A A A G N R A F G D R G L  
UniRef90\_B4WQJ0 T A Q K L L K G C I G T N N F D A N S R L C M S S A V A G Y T Q S F  
UniRef90\_A7IL15 L V I Q K L I R G G F G N N V D T C A R V C H S P T G Y G L S Q T Y

UniRef90\_C9Y3U7 GT A A S G S S L D T L S D T K L V I L W G H N P N E T 190 F G H T 200  
UniRef90\_B8FZB3 GN P Y S G S S P T T F P D A K L I V M F G D N N P A C T R V G G F N S  
UniRef90\_UPI00035FC605 GT M Q D I Y N A D L V I T M G S N T A E S H P V L A  
UniRef90\_F4B6H4 GT K D I K D I A E Y S D L I I I V G H N T T E S H P V V G  
UniRef90\_A4SXX4 G M D A P P C C Y E D I D S A S T I F I T G S N T A F A H P I L Y R R L E D A  
UniRef90\_UPI0003A65002 GT Y E D L E L A D L V I L T G S N L A W C H P V I Y Q R L A A A  
UniRef90\_UPI0003F92519 M G S S F G T D P E E M T E T K L F I I W G I N A V I S T N M H Q  
UniRef90\_UPI000477B9E2 V G N N C T S D L V N T R L V V N F G N N P A E T R M S G G V I Y H L A  
UniRef90\_D1C157 G I D R A P L P M T D I P L A D C L L V V G S N V A E C H P V M  
UniRef90\_A5V706 G E D V V S A S Y D D L D E A D L F I L V G S N T A W C H P I V Y  
UniRef90\_F7Z050 GT I K D I A S A G L V M I V G A N T P A E A H P V L A  
UniRef90\_D1YYX0 G S G A M T N D I G G I A E S K C L F V L G S N T V E Q H P L L  
UniRef90\_UPI00035CAE63 A P F T D A M V S D C V I I I G A R P A T N H P V A A T Y  
UniRef90\_Q46C84 G S G A M T N S I L D I E E S K C I F I I G S N T L E Q H P L I  
UniRef90\_K8W5J3 Y G S Q E A N S P D D I A N T K L V V M F G N N P A E T R M S G G G V T  
UniRef90\_I4MR76 G S A V V S N P L R D V A H A D L V L L G A N P A Q N H P V G A T  
UniRef90\_B4DAA9 G V D R A A N P W S D I L L A K T I I L T G T N L A E C F P I L T D Y  
UniRef90\_UPI00036DAD38 A P F S A A A D A E V I I V I G A N P T I N H P V A A T F  
UniRef90\_Q7X2P6 G E D V V S G S Y A D L D A A D L I V L V G S N T A W C H P V V Y  
UniRef90\_Q1J2V5 G Y G G D S G S I H D L E Q A G L V I G I G T N T A E S H P V L A  
UniRef90\_F9MUL1 G S G A M T N S I G S V E M T D A F F V I G S N T T E T H P V L G  
UniRef90\_UPI00037180DF G E S A G T Q D F D S V M Q A D V I M V I G A N P T D G H P V F A S  
UniRef90\_B4V884 G S Y E D L D R A D V F I L V I G S N M A D C H P V L F  
UniRef90\_I4YRW6 GT Y E D L E E A D L V L V L G S N M T W C H P V L F  
UniRef90\_D1A3S4 P G P I T D L A R A D A I L L A G G N P A E T M P P F M F  
UniRef90\_B8G227 G C L E D F E H A N V F F I I G S N I A E A H P V L F G  
UniRef90\_UPI00030A2AE5 V G G D A S N S C N T L L D S K L I I L H G M N P A E T I F G H F  
UniRef90\_UPI00040B7E24 G G S I G T D P E E T V H S K L I I L W G V N A V I S T N H H Q  
UniRef90\_E3G7Z4 G S N D G N S T S D I E N S R L V V M F G N N P A E T R M S G G G I T  
UniRef90\_C8VN82 G S G A M S V S I P T L E E T D C L L L F G Y N P A A S H P I V  
UniRef90\_A0A059DP53 G S G A M T N S I C Y E D L E E A D L V I T G S N F A W C H P V L H  
UniRef90\_D1AGJ3 G S G A M T N S I S E I E K A D T I F V I G S N T T E T H P V I G T  
UniRef90\_UPI0004647760 G N S T S D I V N S Q L V V M F G N N P A E T R M S G G G I T  
UniRef90\_A9BF64 G S G A M T N S I S E I E G S D V I F V I G S N P T E N H P V I G S  
UniRef90\_A4TRR7 G N G A M S N S I G E I E N T D C I L V F G Y N A A D S H P I K A G G A G P T  
UniRef90\_C8WL81 G K R A I A N S N S D L V N A K L V V M F G E N S V E T H G N N I H L  
UniRef90\_E8V3P9 GT R L I T P P Q D F A H A R L L V A W G A N I H  
UniRef90\_S3UPY0 G E D S V P V S Y D D I E S A D C F L I A G A N P A W C H P V V F R R I E A  
UniRef90\_UPI00047E1F31 T L P W T D I H E T D C L E I A G S N T A E C H P T S M F R V W H  
UniRef90\_L0M2U9 G N G A M S N S I E D L E N S C L L V F G Y N C A D S H P I  
UniRef90\_W0UZ78 G A S I G T D L E E Q F Q N A K L I L I W G G N P I A S N L H F  
UniRef90\_HOJZM8 GT Y E D L E L A D L V L V L G S N L A W C H P V L Y Q R I A A A  
UniRef90\_UPI0002556D6A G E S A G T Q S F D S V M Q A D V I L V M G A N P T D A H P V F A S  
UniRef90\_I0XN62 V G Y E D L D V A D C F L V A G A N P A W C H P I V F R R I E A  
UniRef90\_G8ND99 G G A S M T N P L E D I G K T D L F L V V G S N T T E T H P V I A A M  
UniRef90\_Q023D2 G V D R A P N P W N D I S E A E V L F V I G A N I G E C A P I T  
UniRef90\_C7Q4T2 G S Y Q D F E H A D A F F V I G A N M A D C H P I L F T  
UniRef90\_A7K229 G S G A M T N D I P S K H S D V F I I G S D T T S A H P I I A  
UniRef90\_UPI000375BFEE G S Y Q D F E H A D R A D L F F V I G S N M A D C H P I L A  
UniRef90\_Q2WB01 G S G A V T A P V A E V A N A E V I V L I G A N P S A N H P V A A S F I K N A V  
UniRef90\_UPI00047C0F8E G A D A P P C S Y E D I D H A G C I E I T G S N T A W A H P I L F R R I E D A  
UniRef90\_I9BRR1 G G S L G M D M E F V D D A R L I I I W G G N P I A S N L H V  
UniRef90\_D4E3Y4 G F D A P P Y T Y Q D F E E S D V I L L V G S N C I A H P I M W Q R I  
UniRef90\_UPI00037ABB99 G S Y D D L D H A D L F F V I G A N M A E C H P I L Y  
UniRef90\_M3UJP4 G S Y D D I E R A D L F L V I G S N M A D C H P I L Y  
UniRef90\_UPI00046706E7 G T S A G T Q D F D S V E D S D V I L V I G A N P T D A H P V F A S  
UniRef90\_UPI00035DF04C G S G A M T N S I E D V T R K A E V I M L V G S N P E E A H P V I G M  
UniRef90\_C8WK53 G S Y E D L D R A D V F I L V I G S N M A D C H P I L F  
UniRef90\_M3EW38 T G Y D T Q V G V D Y A N T K H I V M Y G R N L F E A L E I K A  
UniRef90\_A0LNF8 G E S A G T Q T F D S V M K A D T I V V I G A N P T D A H P V F G S  
UniRef90\_M7D1T9 G S D T V P G C Y E D L E D A D L V V L V G S N L A W C H P V L Y Q R I L A A R  
UniRef90\_W6LV86 G E D S V P I S Y D D L E A D C F L I A G A N P A W C H P I L F R R I E A  
UniRef90\_I0XU44 G S Y Q D F E H A D V F F V I G A N M A D C H P I L F  
UniRef90\_H8IT28 G S G A M S L S I P E I E D A K L L L I F G Y N P A E S H P I I V  
UniRef90\_H6LB59 G G G A M T N D I P S I K D S D V I L I G S D T T S A H P I A  
UniRef90\_Q087B8 G E S A G T Q T F D S V M Q A D A I L V I G A N P T D A H P V F G S  
UniRef90\_W1N9V0 G C Y D D F E S T H C L M A F G S N L P E Q H P I I Y W  
UniRef90\_I2JPF1 G E S A G T Q T F D S V M H T D V I L M G A N P S S A H P V F A S  
UniRef90\_A9I094 G S D G P P C C Y D D L E Q T D C A F I I G A N P A E C H P I A Y N R L Q K H H  
UniRef90\_K8GNM6 V G G A G Q T N P Y E D L G G F G A I L I W G Y N P A E T H P V L V  
UniRef90\_R4KEZ4 GT Y E D L E L A D L V L V G S N L A W C H P V L Y Q R I A A A  
UniRef90\_G0HJD4 G A A L G G H E P Y D L S N S R Y I I L I G R N E T E S L H V S E L Y H  
UniRef90\_UPI00047CD7BB G E D V V P G C Y E D F E L A D A I V L V G S N A A W C H P T L F Q R I V K A  
UniRef90\_W0JJ08 G S D G P T C Y D D I Q H A D V F L I I G A N M A V N H P V L F Q M I R K Q  
UniRef90\_UPI0003B55465 G S G A M T N S F D D F A N A K M I L A I G T N A T E A H P V A G T  
UniRef90\_A0LP28 G Y G A D S G S F R D I E S A D L V I I E G S N T A E A H P V A A  
UniRef90\_A0A031LS37 G E S A G T Q T F D S V M A D V I M V I G A N P T E G H P V F G S  
UniRef90\_I9BST8 G E D L V P C S Y E D L E L A D L V I L V G S N T A W C H P I L F Q R L T R A  
UniRef90\_Q1LDU3 G S D G P P C C Y D D L D E L T D C A F L V G T N T A E C H P I I F N R L R K H  
UniRef90\_Q51328 GT Y E D I D E A D L V L V G S N L A W C H P V L Y  
UniRef90\_A3W033 GT S A G T H D F A S V D Q A D V I V I G A N P T D G H P V F A S  
UniRef90\_I4Z4S7 GT I R D I A A A E L V M V G A N P A E S H P V L A  
UniRef90\_A0A015M5C6 G D M L E S L L T E I E N S D L V V M F G H N L A E T R M S G G G Q F  
UniRef90\_UPI000370A4D6 G S Y D D L D R A D V F I L V S G A N M A D C H P I L F  
UniRef90\_UPI00040D2EAB G Y G G D A G S M S D L Q E A D L V I T V G S N T A E S H P V L A  
UniRef90\_V6MBL6 G Y G G D S G T I K D L A E A G L V I I G A N P T E G H P V L A  
UniRef90\_Q1ZA48 F T M G S A P T E F R N S D L I L Y F G N N P A N T R M S G G S D T  
UniRef90\_D9TEZ9 P F P L A D L G H A D T L L V G A N P A E T M P P L M  
UniRef90\_B4WQJ0 G S D G P P C C Y D D L E A T D C A F L I G T N T A E C H P I V F N R L K K H H  
UniRef90\_A7IL15 GT S A G T Q D F D S V E E T D V L L I G A N P T D G H P V F G S

UniRef90\_C9Y3U7 N H Y F Q Q M K R N G T R F I V V D P R Y S D T V A S L A D Q W V P L R P T T D  
UniRef90\_B8FZB3 T Y Y L K L A K Q N G A R L I V V I D V R K H S D T V A S T F A D Q W I P L V R P P T T D  
UniRef90\_UPI00035FC605 G K I K R A K K L R G A K K L I V V I D V R K K H E M A E R A N D L F I K V P P P G T D  
UniRef90\_F4B6H4 S K I K R A Q K L R G A K V V V I D V R K K H E M A E R A N L F I R P N K P P G T D  
UniRef90\_A4SXX4 R K N N P D L K V I V V D P R K T D T A D I K E A D L F Y L Q I Q P P G T D  
UniRef90\_UPI0003A65002 K A A R P G M K V V V I D P R R T M Q T A D I K E A D L F H L A I R P P G T D  
UniRef90\_UPI0003F92519 M T I A Q K A R K N G A K L V V I D V H K N Q T G R M A D W F I P L R P P G T D  
UniRef90\_UPI000477B9E2 E A R K R S N A R M I T F D P R M T D T T L G A N D E W V P L R P P G T D  
UniRef90\_D1C157 M Q W L W A R A R D K G A S L I V L D P R R E T A T A R T A D L W L P V R P P G T D  
UniRef90\_A5V706 Q R I Q A A R E K R G A K L V I D P R R T A T A C E R D A D L H L P L R P P G S D  
UniRef90\_F7Z050 T R I K R A H K L H G Q K L I V A D M R K N E M A E R A D L F L H P N Q G T D  
UniRef90\_D1YYX0 G R K I V Q A K K G A K V I C F D P R F T P T A R L A D L Y A S F Y P G T D  
UniRef90\_UPI00035CAE63 F K Q A A K K G T K V I V M D P R F Q D M M K F A E H A L S Q F K P G T D  
UniRef90\_Q46C84 G R R V M L A K K G A K L V C A D P R Y T P T A K Q A D L H L S M Y S G T D  
UniRef90\_K8W5J3 Y Y V E Q A R E R S N A R M I V I D P R Y N D T A S G R E D E W L P I R P P G T D  
UniRef90\_I4MR76 W I K N A V R A S G T R L V L A D P R R T E L A R R H A W R Y L G F A P G S D  
UniRef90\_B4DAA9 V W R A R D N G A K I V I D P R I T P I G R T A D L F L P V R P P G R D  
UniRef90\_UPI00036DAD38 I K N A T K K G A K L I V I D P R R T T A T L S R H A Y K H L A F K P G S D  
UniRef90\_Q7X2P6 Q R I M A A R E K R G A K L V I D P R R T E T A E A D L H L P L R P P G S D  
UniRef90\_Q1J2V5 T R V K R A H K L R G Q R L I V A D L R E H E M A R R A D L F L R P N P P G T D  
UniRef90\_F9MUL1 T K I R K R V R E G G A K L V V A D P R E S I Q L A K M A D V Y L Q I K P P G T N  
UniRef90\_UPI00037180DF Q M K R R L R G G A K L I V V D P R S I D T P H V Q A D Y H L K L K P P G T D  
UniRef90\_B4V884 L R M M E R V R A G A K L I V V D P R R T A T A D K A D L F L P V R P P G T D  
UniRef90\_I4YRW6 Q R L L A A R E R R G T R I V V I D P R R T V T A E A A D L H L A I A P N S D  
UniRef90\_D1A3S4 R H L T Q M R E R G G A L I V V D P R R T A T A R Q A D L H L Q P S P G T D  
UniRef90\_B8G227 R L T D K K K D P D T K I I I A D P R R H R S H E T A D L S L Q F V P P G T D  
UniRef90\_UPI00030A2AE5 N M Y L R M A K A K G A K I Y T I D P R K T D T E V A L A D D W F P V K P P G T D  
UniRef90\_UPI00040B7E24 I V L A Q K A R K N G A K L V V I D V H R N R T A D W A D W F I P I L P P G T D  
UniRef90\_E3G7Z4 Y F L E Q A R E R S N A R M I V I D P R Y T D T A A G R E D E W V P V R P P G T D  
UniRef90\_C8VN82 A R R I V N A K E R G A D L I V C D P R V T E S A R I A D M Y L P L K N G S N D  
UniRef90\_A0A059DP53 Q R L L A A K S R R G T K L V I D P R E T A T T E A A D L H L R I R P P G S D  
UniRef90\_D1AGJ3 Y I Q K A K R S G K N L I V A D P R K I E L A E K A D L F M Q L K V G T N  
UniRef90\_UPI0004647760 Y H L E Q A R E R S Q A R M I V I D P R Y T D T A A G R E D E W L P L R P P G T D  
UniRef90\_A9BF64 K I K K A K K N G T H L I V A D P R K I E L S E I A D L S L H H K P P G T D  
UniRef90\_A4TRR7 A R R I L K A K N K G A K L I V C D P R H I E T A R I A D Q W L P L K N G A N  
UniRef90\_C8WL81 Y H L E Q A L E Q G G A K V I V I D P R Y S D T V A K T R A D Q W I P I R P P G T D  
UniRef90\_E8V3P9 W P F I E A R R N G A R L I V I D P Y A T R T A K L A D W H I P I R P P G T D  
UniRef90\_S3UPY0 R K K S D P S I K I V V D P R R T E T C E N A D I H L Q I R H P P G T D  
UniRef90\_UPI00047E1F31 V Q E R G G Y L I V V D P R E T P A R R A D V H L D L R K N G C N  
UniRef90\_L0M2U9 A R R V I K A K E K G A K I V C D P R R I E T A R I A D Q H L Q I K N G C N  
UniRef90\_W0UJZ78 W T R A Q E A K R H G A K L I A I D P Y R S L T A D K C H Q H I A L L P G T D  
UniRef90\_H0HZM8 K E K R P G M K I V L V D P R R T M T A D I A D L H L A I A P D G D  
UniRef90\_UPI0002556D6A Q L K R R L R Q G A R L I V I D P R R I D S A H A R A E L L Q L R P P G T N  
UniRef90\_I0XN62 R K K E N P N I K L I V V D P R R T E S C E H A D I H L Q L R P P G T D  
UniRef90\_G8ND99 I K K R V R Q G A G L I V V D P R Y T G M A E A A T L W L R V R P P G T D  
UniRef90\_Q023D2 T D Y I W A R A R D K G A K L I V A D P R F T P I A R N A D L Y L P V R P P G T D  
UniRef90\_C7Q4T2 L R L L E R R K S G A K L I V V D P R R S A T A D K A D L F L Q I K P P G T D  
UniRef90\_A7K229 S H I K Q A I R H H G A R L I V A D P K R V D M A E H A D L Y L A H R P P G T D  
UniRef90\_UPI000375BFEE F L R M M D R V K A G A K L V V D P R R T A T A D K A D L F L K I R P P G T D  
UniRef90\_Q2WB01 K G G A Q L V I L D P R G Q A L T R F A S H H L K F N N G T D  
UniRef90\_UPI00047C0F8E R A R N P G L K I V S D P R R T D T A E I A D L V L P L Q P P G T D  
UniRef90\_I9BRR1 W M R M Q E A K R R G A T L V A I D P Y R S L T A E K C H R H I A P M P P G T D  
UniRef90\_D4E3Y4 M I S I D P V H N D S A K F V N A Q W I A P R P Y T D  
UniRef90\_UPI00037ABB99 E R N K H N P E I V V I D P R R T E T A V A G T Q H Y P I L P P K S D  
UniRef90\_M3UJP4 L R M M D R V K A G A K L V V V D P R R T A T A A K A D I Y L P V R P P G T D  
UniRef90\_UPI00046706E7 F L R M M D R V K A G A K L V V V D P R R T A T A E K A D L H L A P Q P P G T D  
UniRef90\_UPI00035DF04C Q M K R R L R E G A R L I V V D P R R I D T P H V E A D Y H L Q L R P P G T N  
UniRef90\_C8WK53 Q I R A A V E R G C R L I A V D P R D I G L A A H A D I H L K L R P P G T N  
UniRef90\_M3EW38 L R M M D R V K A G A K L I V V D P R R T A T A E K A D L F L R I R P P G T D  
UniRef90\_A0LNF8 I N N L L S A M G K G A K L T Y I D P R V T V T A S K A T R Y W M I R P P G T D  
UniRef90\_M7D1T9 Q M R R R L R Q G A K L I V I D P R R I D T P H G S E G I H L P L R P P G T N  
UniRef90\_W6LV86 E Q R A G K P R L V V I D P R R T A T C E A A E I H L P L K P P G S D  
UniRef90\_I0XU44 R K N S D P N V G K I V V D P R K T E S C E N A D L H L Q I R P P G T D  
UniRef90\_H8IT28 L R M M D R V K A G A K L I V V D P R R T A T A D K A D L F L Q I A P P G S D  
UniRef90\_H6LB59 A R R I K A K Q K G A K I V V D P R I T E S A R I A D L H L Q I K G G S N  
UniRef90\_Q087B8 S H I K R A V S Q H G A R L I V A D P K R T A T A D S A H L Y V S H K P P G T D  
UniRef90\_W1N9V0 L M R K V R Q G A S L I V A D P R R I D T P H L E D A Q H L P I R P P G T N  
UniRef90\_I2JPF1 R L K E A L E K R K F P L I V V D P R V T M F A Q F A D I H L P I T P P G T D  
UniRef90\_A9I094 R M K R R L R Q G A R L I V I D P R R I D S P H I K A D Y H L P V R P P G T N  
UniRef90\_K8GNM6 K K N A V K I L V V D P R C T Q T A E D A D L H L A I Q P P G T D  
UniRef90\_R4KEZ4 V K Q L T N A L E N G T K L T Y I D P R V T V T A T K A D K Y L M I R P P G T D  
UniRef90\_G0HJD4 M D Y L L R A K K R G A K V I V V D V R E T R T M A F A D Y S L V I R P P G T D  
UniRef90\_UPI00047CD7BB R E K R P E M K I V L V D P R R T M T A D I A D M H L A I A P D G D  
UniRef90\_W0JJ08 F A K A I G N K A K I V Y V D P R Y T H T A A K A D K F L Q I K P P G T D  
UniRef90\_K9DA51 K E A R P E L Q I V L V D P R R T A T C E E L A D L H L P L A P P G S D  
UniRef90\_UPI0003B55465 R A L D P N A R I I A V D P R R T K T A D F S D I H V P L K A P P G S D  
UniRef90\_A0LP28 Y L K N A V A K G A E L I V V D P R R I E L A D H A V L H A Q I K V G S D  
UniRef90\_A0A031LS37 G K I K R A K K L N G Q K L I V V D V R K H E M A E R A D L F V T P N P P G T D  
UniRef90\_I9BST8 Q L K R R I R E G A R L I V V D P R S I E T P H V A A D H H L K L M P P G T N  
UniRef90\_Q1LDU3 K E A R P E M K L V A I D P R R T A T C E L A D L H L P L R A G T D  
UniRef90\_Q51328 H K N N G K V K M V V V D P R R T A T A E A A D L H L A I K P P G T D  
UniRef90\_A3W033 Q R L L A A R K A R G T R I V V I D P R R T A S C E D G A D M H L A L Q P P G S D  
UniRef90\_I4Z4S7 R M K R R L R E G A R L I V I D P R R I D S P H I E A D Y H L P L K P P G T N  
UniRef90\_A0A015M5C6 T R V K R A H K L H G Q K L I V V D L R K H E L G R R A D V F L P R P P G T D  
UniRef90\_B4EZ02 Y E T L N A L D K S K S K L I V I D P R R T D S V T T L G A E W I P I Y P P G T D  
UniRef90\_UPI000370A4D6 L R M V D R L N A G A K L I V V D P R R T E T A A R A D L F L Q V A P P G T D  
UniRef90\_UPI00040D2EAB S K I K R A Q K L H G Q T L M V I D L R K H E M A R R A D E F Y P K P P G S D  
UniRef90\_V6MBL6 T R V K R A K K L H G Q K L I V S D L R R H E M A R R S D L Y I H P K Q G T D  
UniRef90\_Q1ZA48 Y N Y Q V N K R V K T P R T I I I D P Q Y T D T A C G R E D Q W I P I H P P G T D  
UniRef90\_D9TEZ9 R H V A D L R E R G G R L I V V D P R A T A T A R Q A D L H L P L P P G T D  
UniRef90\_B4WQJ0 K N K A V K L I V V D P R R T E T A R Q A D L H L A I K P P G S D  
UniRef90\_A7IL15 R L K K R L R E G A K L I V V D P R R T D S P H I E A A Y H L P L K P P G T N

UniRef90\_C9Y3U7 N A L M D A M M F V I T S E N L H D S A F I A R H V I G F D E N T M Y L F G E K  
UniRef90\_B8FZB3 S A L V A G M A Y V M I S E N G L H D S A F I D K Y C L G F D E E H M Y I L G E S  
UniRef90\_UPI00035FC605 L T L L N A V S K Y I I D D K G W E N D K F F I D Q E R T V G F D E E F K K E S I L E K F T  
UniRef90\_F4B6H4 A A I L A A V A K Y I I D D K G W E N D K F F I D Q E R T V G F D E E F K K E S I L E K F T  
UniRef90\_A4SXX4 V A L Y H G M L Y I M L W E K W I N E S Y I N S Y T A D F D A L R D L V R D F T  
UniRef90\_UPI0003A65002 V A L F M G L L A H L A G N E A A I D Q N Y I N G T Y T T G F A E A F A A A S A L D  
UniRef90\_UPI0003F92519 A A L A L G L M H I L F N E Q L V D R L F L E T Y T V G A Q E L E M H V K D Y T  
UniRef90\_UPI000477B9E2 A A L V A G M A W V M I T E N L V D N D F L S K Y T V G Y D W K S Y I L G N G K  
UniRef90\_D1C157 I A V L N A M L R Q I V H D G L V D D E E Y I Q D R S T V G W E A V R E V I E R Y T  
UniRef90\_A5V706 V A L M N G L L A H C R R A G L I D D Q V F V D A R T L S I P E S G F W D V I G Q G G  
UniRef90\_F7Z050 Q V W L M A V T K Y I T D Q G W H D Q K F I E E K V N F F D E F K E T L E K Y T  
UniRef90\_D1YYX0 V A L L N G L L M Q H I I K N G W E A K D Y I A T R T K D F E K V K A V V M K P E  
UniRef90\_UPI00035CAE63 V A M L N A L H V I V D E E L Y D E Q Y I Q A N V T G F A A L K E K V K D F A  
UniRef90\_Q46C84 V S L L N G L L M H H I I E N G W E D S V F I S K R T K N Y E E M R S V V I Q E A  
UniRef90\_K8W5J3 G A L A A A L A Q V I I E N D M V D Q E F V D P A Y H C I G Y H Y K A Y I L G Q G S  
UniRef90\_I4MR76 V A L L N A M L Q Y I V S E G L T D P A Y V A H T R D F D T I K A H V A A F T  
UniRef90\_B4DAA9 S A L A N G I L H V M I E R G W T D E K F I A E H T H D F D K V R E L V K K Y T  
UniRef90\_UPI00036DAD38 V A M L N A M I N T I L N E G L T D D A Q Y I A G Y T E G F E E L K A R I Q E F T  
UniRef90\_Q7X2P6 V A L F N G L L A H C R A R A G L I D D Q V P A G F W E A L G A  
UniRef90\_Q1J2V5 F V W V T A V A K Y I L D H G L E D R A F I E R W V N G L D E Y R A S I A E Y T  
UniRef90\_F9MUL1 V A V M N G M M H V I L E E G L V D Q A E I D E R T E G F D Q L K E V L K K Y T  
UniRef90\_UPI00037180DF V A L V T A L A H A I V T E E G L V D E E F V R T R C E A D A F A K W R A F V S E  
UniRef90\_B4V884 L A L L N G L L H L L V E N G H T D P A F I A A H T E G W E E M P A F L A D Y P  
UniRef90\_I4YRW6 L A L F A G L L D H L D R E M G F R D A E Y V A E R T S G L D D A L A A  
UniRef90\_D1A3S4 L A L A N G L L H V A I V E E G F L D E A F I E R T S G F E A V R V S V N A Y W  
UniRef90\_B8G227 M A L L H A M A Y V I I E E G M A D E E F I A K H T S F S N E A I T F A A Y K E  
UniRef90\_UPI00030A2AE5 N A L V A A M A Y V I F S E N L Q D K K F I D T K Y C I G H D E A H M Y I M G K K  
UniRef90\_UPI00040B7E24 A A L A L G I M H I L F S K E Q L T D E E F L D K Q T V G H H E L A R H T A K Y T  
UniRef90\_E3G7Z4 A A L V A G I A W V L I D E N L V D Q P F L D K Y C V G Y H Y K A Y I L G Q G D  
UniRef90\_C8VN82 L A L L N A F A Y A I L D E E L R D D W F I D D H T T G F D V W W E V V Q D Y A  
UniRef90\_A0A059DP53 V A L F N G L L R H L A R S E G D R A D T R F I D Q H T T G A E G A L E A A E T C  
UniRef90\_D1AGJ3 I A L L N G M M N V I T S E N L Q N K D F I E E R C E N Y S G L V S V T E I Y T  
UniRef90\_UPI0004647760 A A L V A A L A W V M I D E N L V D K A F I D R E Y C V G Y H Y K A Y I L G Q G E  
UniRef90\_A9BF64 V A L I N G I M N V I V E N G L V D Q K F I E E R T E G F E S Y I K V I E G Y T  
UniRef90\_A4TRR7 M A L V N A F I H V L I E E K L Y D A N Y V R D H T R G F D E L K A G V A A Y R  
UniRef90\_C8WL81 A A L V D A G A H T V I E E D S L V D H D F L A T Y C I G Y D Y K A Y I M G Q G V  
UniRef90\_E8V3P9 V A L A L G M M H V I L R E G S L E N T A Y L E A Y C H G F E A L C E R A L S A T  
UniRef90\_S3UPY0 I Y L F H A I A R I L I E N N W I D L E F I V Y H T E G F D E L K D K V F E K S  
UniRef90\_UPI00047E1F31 L A L A N G I F L N L L I E N G Y A D A E F V N N H T N G F D E E T K E L V K E F T  
UniRef90\_L0M2U9 M A L V N A F S H V L L I Q E N L Y D K E Y V A R Y T T G I D E L R E I V K D Y A  
UniRef90\_W0UJZ78 A A L A L G M M H V L I A E D W I D H A Y V A D Y T L G F E Q L S Q R A S G E W P  
UniRef90\_H0HZM8 V A L F S G L L A F L A E S R D V L D R A Y I E A H T T G F E A A L A A A S  
UniRef90\_UPI0002556D6A V A M L N A L A N V I V E S E G L L N Q R F I E E R C E D A D F A R W R D F V S Q  
UniRef90\_I0XN62 I Y L F H A I A R I L I E E K D W I D P K F I Q D H T E G F E D L K A K V F D I S  
UniRef90\_G8ND99 L F L L N A M A R Y I L I E E G L W D R A Y V E A H T T G F A E W R A S L E A Y T  
UniRef90\_Q023D2 L A L L M G M L H V I I R E D G L T D P A F I E A H T T G F E K T A S V E A W N  
UniRef90\_C7Q4T2 L A L L N G L L H L L V E N G H I D E E F I A A H T E G W D D M L G F L A D Y S  
UniRef90\_A7K229 V M L L N G V M Q Q I I K N G W Y D Q E F I E E R V D G F D T L Q D E V M S P A  
UniRef90\_UPI000375BFEE L A L L N G L L H L L H A N G Q T D A D F I A A H T E G W A M P D Q F L G D Y T  
UniRef90\_Q2WB01 V A L L N A M L H V I V A E E L Y D R D F V Q A R T T G F A E L A Q H L K S Y A  
UniRef90\_UPI00047C0F8E V M L F N G L L H L M L W E G W T R P D W M A E H T T G F D A L K A S V R D Y C  
UniRef90\_I9BRR1 A A L A L G V M H H L I R E D G L L D H A Y I A E H T L G F E A L R E R A A Y P  
UniRef90\_D4E3Y4 S A M L I G I A H T L I S E K L L H N P D F L K T Y T V G F D R F A A Y L L G E E  
UniRef90\_UPI00037ABB99 L S F F Y G L A K V L I D D A G W V D R G F I A E H C N G A E F E T H V I A S F T  
UniRef90\_M3UJP4 L A L L N G L L R L V V D A G G V D Q G F I E A N T D G W D T M G P L L A D E Y P  
UniRef90\_UPI00046706E7 L A L L N G L L H L I V E A G G I D Q A F I E A N T E G W A E M P A F L A D Y P  
UniRef90\_UPI00035DF04C V A L V N A L A H V I V T E G L A D E A F V A E R C E S E A Y A D W R E F L V R  
UniRef90\_C8WK53 V A F A N G I V N Y I L Q H E L Y D E D F V A R E R T E G F E I L A A T V R D Y T  
UniRef90\_M3EW38 L A L L N G L L H L L H A D G H T D P D F I A A H T E G W E A M P G F L A D Y A  
UniRef90\_A0LNF8 L A L N Y A L M H V I V E E G L F D A E F V R R W V L G L E E L R A F V E P F T  
UniRef90\_M7D1T9 V A M V N A L A H V I V T E E G L E D K A F I E S R C E P D Q Y R A R D F I  
UniRef90\_W6LV86 T A L F N G L L A H L Y Q Q D R L N P E F L D R H V A G F W S A Y Q A A K A V A  
UniRef90\_I0XU44 I L L F N A I A R V L T E N D S L D P N F I K S H T E G F E E L K E K V F S M S  
UniRef90\_H8IT28 L A L L N G L L H L I V E N G H T D P E F I A E F T E G W E M P S F L A Q S Y T  
UniRef90\_H6LB59 L A L V Q A M A N V I I L E G L V D H P F I E D H T S G Y E E Y K K Q I E K Y P  
UniRef90\_Q087B8 V M L L N A I M Q Q I I I N N W Q D M H Y I N S R E D Y E L L K Q E V M K P D  
UniRef90\_W1N9V0 V A L V N A L A H V V V T E N G L E D Q E F I A S R C D T A Y N A W R V F A E  
UniRef90\_I2JPF1 L V L L N A L A H V I L A E G L Q D E A Y I E A H C N G F D E L K A T V A K Y D  
UniRef90\_A9I094 V A L L T A L A H V I V T E N L V D E D F V A E R H C S D K A F G Q W R D F Y S  
UniRef90\_K8GNM6 V D L L N G I A Y L L I Q W G Y L D R A F V E N H T S G F A E F S E T I R H V S  
UniRef90\_R4KEZ4 L A L S Y A L M N V I I N E E L Y D K E Y V R H W V L G F E E L K Q F V G K Y T  
UniRef90\_G0HJD4 I A L A N A L M N L I R E E L Y D E E F I K T R T V G F S E L R M A V  
UniRef90\_UPI00047CD7BB V A L F T G L L A W L G Q H N A L D R T Y T A H T T G F G Q A L F A A S A L D  
UniRef90\_W0JJ08 T A F V L A L I N V M V T E D L I N H D F V E K Y T T G Y D K L K P H I V K Y T  
UniRef90\_K9DA51 V R L F N G L L T Y L V G E G A V D H A F V A A H T S G M E A A L D E A R L G G  
UniRef90\_UPI0003B55465 V A F L Q L I A K R L L A V I G R V N R R F V R R S T E N G M A A Y E N H L N S L D  
UniRef90\_A0LP28 I A F L N G V M N V L I N E N L H D K Q Y V A S Y T D G F E S L K A K V M E Y P  
UniRef90\_A0A031LS37 L V L I K G I E K Y I I D Q G W E D K D F I S N R T S N F E K F E S L N D I N  
UniRef90\_I9BST8 V A I V N A L A H V I V T E G L V D E A F V R N E R C E L P S F F E M W R T F V  
UniRef90\_Q1LDU3 V R I F N G L L S Y L A R H G H G D D V F V A D H T A G L N D A L A V A D A D G  
UniRef90\_Q51328 I D L F N G M A Y L L M R W G K I D T L F D E C Y S N F P A Y C E V I R H Y P  
UniRef90\_A3W033 V A L F N R L F I M L W Q G G A L D K D F I R H T T G  
UniRef90\_I4Z4S7 V A M I N A L A H V I V T E G L V D E D Y V R E R C E L D A F E S W A R F I  
UniRef90\_A0A015M5C6 L T V V S A V T K Y I L D Q G W E D R E A F N G R V N G V R E Y E A S L D K Y T  
UniRef90\_B4EZ02 A A L V A L A G Y V M I Q E G I T D E A F L R E Y C I G W D Y K D Y I L G N G P  
UniRef90\_UPI000370A4D6 L A L L N G L L Y L L A E N G H L D E E F I A E H T T G W A A M P E F L A D Y P  
UniRef90\_UPI00040D2EAB L V V L S A V T K Y I L D N D L V D H R F V E Q W V N Q F K E Y K E S L E P F T  
UniRef90\_V6MBL6 Y V W L T A V A K Y M I D Q G W H D E K F I Q D R V N F F T E Y R E S L Q K Y T  
UniRef90\_Q1ZA48 A A L V E A L A Y I L I T E N Y V D E E F L A T Y C Y G Y D Y K A Y I L G H G A  
UniRef90\_D9TEZ9 L A V A N A L L H I A L I T E N G W L D R A Y T E R T D G F D E Y A R T V A G Y W  
UniRef90\_B4WQJ0 I A L L N G I A Y L L I R S N Q H D P V A F I D Y C T D G F T E Y A Q V V H Y P  
UniRef90\_A7IL15 V A I V T A L A H V V V T E G L V N E Q F V R E R C D W D E F Q D W A F V A

UniRef90\_C9Y3U7 D G V K K T P E W A E R I T H V I P A Q T I R Q L A R D Y A T T R A A L I Q G W G  
UniRef90\_B8FZB3 D G K P K T P E W A S E I T G I P V E T I K Q L A R D I A T K P G F I L Q G R G  
UniRef90\_UPI00035FC605 L D Y A E E K K T G V K K E D I I K M A E M I H E A R N T C I C Y A M G  
UniRef90\_F4B6H4 L D Y V E S I T S G V P K E Q I I K L A E M I H E A K N V V I L W G M G  
UniRef90\_A4SXX4 P K A V S Q I C G I N E K D L F Q A A Q W F A T S P A T L S M Y C Q G G  
UniRef90\_UPI0003A65002 I A E L M E L T G L P S M Q L R Q F F R L F E E T E K V V T C Y S Q G G  
UniRef90\_UPI0003F92519 P E R V S E L T G V P S E S D I Y K L A R M Y G T T S P S M I R I G N G  
UniRef90\_UPI000477B9E2 D G V E K T P Q W A A K I T S V P A E T I I R L A R E I A M T K P C I M Q G W G  
UniRef90\_D1C157 P E L A E R I S G V P A E R I V A A A R L Y G R A P T S L V M H A R G  
UniRef90\_A5V706 D L P E W S V A R T C D V A P E A L L R F Y E L F A A H P R T V T L F S Q G  
UniRef90\_F7Z050 L D Y A E K I T G I P K E T L V Q I A E M I H Q A D G T C I L W G M G  
UniRef90\_D1YYX0 P E Y T A K I C G G K A E D I V K A A R I Y G Q A D K A I I Y Y S M G  
UniRef90\_UPI00035CAE63 P E D M A E V C G I P A E T L R E V A R L Y A T S E R S I F W G M G  
UniRef90\_Q46C84 Y S L P N V S K I T G V P E N D L K T A A E W I A Q S K P S A L I Y S M G  
UniRef90\_K8W5J3 D G I A K T P Q W A A K I T G L P A D K I K L A R E I G Q K P A Y I V Q G W G  
UniRef90\_I4MR76 P E A M A P V C G I E P E V I R E V A R A F A T A K S A M I L W G M G  
UniRef90\_B4DAA9 P E V T E K L S G V P A K N I I K A A E M W G P A E T S M L L H A R G  
UniRef90\_UPI00036DAD38 P E K M A P V C G L D A Q T L R E V A R L Y A T A R S S T I F W G M G  
UniRef90\_Q7X2P6 E G H D L W S T A Q T C D L V P A D L Q R F Y Q L F A A H P R T V T L F S Q G  
UniRef90\_Q1J2V5 L E R A E E L T G V P A E T L K Q I A H E I V I Q A D G T C I M W A M G  
UniRef90\_F9MUL1 P E Y T A K I C G G K A E D I V K A A R I Y G Q A D K A I I Y Y S M G  
UniRef90\_UPI00037180DF P Q R N S P E A M E S V T G V P A A Q V R S A A R L Y A T G N G A I Y Y G L G  
UniRef90\_B4V884 P A A V A E T T G I P E A D L R T A A E W I G R A G E W T S C W T M G  
UniRef90\_I4YRW6 A Q D C G F P R A L E A T R L P A E K L R E F Y T L W S R S E R V V T A Y S Q G  
UniRef90\_D1A3S4 P E R V E R I T G V P A T H Q R E A V R L L G R G A R A L I L T A R G  
UniRef90\_B8G227 F L K E F T P E K A E K V T G L P A A Q I Q E V A R L F G E K N T M S M W T M G  
UniRef90\_UPI00030A2AE5 D K T P K T P E W A A K I T G L P A S R I K Q L A R E V A T T K P M A W I Q N G  
UniRef90\_UPI00040B7E24 P E I V S K I T G V P A E D I Y K I A R M Y G T I P S F I R I G N G  
UniRef90\_E3G7Z4 D G V A K T P A W A A R I T G V P E D K I I Q L A R E I G S K P A Y I C Q G W G  
UniRef90\_C8VN82 P E D V I E V I T G V P S E T I R Q A A R L E Q F Y R R Y A N A D T A V I G W M G  
UniRef90\_A0A059DP53 L H H V S G I T G V A P D V I L E Q F Y R L Y A E T R M T I Y S Q G  
UniRef90\_D1AGJ3 P E Y T E K I T G V P A K D I I N A A R L Y A G S K N S T I I F S M G  
UniRef90\_UPI0004647760 D G I A K T P A W G S R I T G I P R A R I V T L A R E I A A K P A Y I C Q G W G  
UniRef90\_A9BF64 P S K V S Q I T G V P A D K I I E A A K M F G L A E K A A I Y F A M G  
UniRef90\_A4TRR7 P E D V I E P I T G L S A K A V R Q A M R T Y A A A P A A T L L W G M G  
UniRef90\_C8WL81 D G V E K T P A W A E G I T G M P A D T I V E L A R E Y T T A K P C I Y Q G K G  
UniRef90\_E8V3P9 Y T P D N V I A R I T G M S T D D I V K L A R E Y A T T K P A V I R M N Y G  
UniRef90\_S3UPY0 L E E V I S E I C G V P A Q L I Y Q T A E A I N R S K G F L S L W A M G  
UniRef90\_UPI00047E1F31 P E Y T S Q I T G V A K E K I R A A E I Y G K A P N A L V M F A R G  
UniRef90\_L0M2U9 P e a V E A L T G V T A Q Q I R Q A M R T Y A A A P S A T I M W G M G  
UniRef90\_W0UJZ78 P Q R V A E V C G I T A Q E V V G L A R L Y G Q T V K D G E G A A I R A N Y G  
UniRef90\_H0HZM8 A L L G M A E I A R R T G L D E E T L L R F F T L F A E T P K T V T V Y S Q G  
UniRef90\_UPI0002556D6A P E H A P E I L L G P I C G V P A E Q I R A A R L Y A T G N A I Y Y G L G  
UniRef90\_I0XN62 I S K A A E I C G V S P E L I Y K T A E Y I S K A K G F I S L W A M G  
UniRef90\_G8ND99 L E E A E R V T G V A R E R I A Q A A R L Y A T T E R A G A Y W A M G  
UniRef90\_Q023D2 P R R A A E V S G V A P E A I E K A A H L I G E S R R A M L M H A R G  
UniRef90\_C7Q4T2 P A Y V A D V T G I P E A D I R L A A Q W I G E A G E W M S C W T M G  
UniRef90\_A7K229 Y N L D K V E L V T G I K A D D I F A M A R M I G T K R T A V Y Y S M G  
UniRef90\_UPI000375BFEE P E K V A A I T G L T E A D I R L A A Q W I G D A R E W T S C W T M G  
UniRef90\_Q2WB01 P E A M A P L C G I D A G T I R V V A R L Y A R A A S A M I L W G M G  
UniRef90\_UPI00047C0F8E P D V V A E V C G L R K D D L L T A A R W F A T D D M A S P G G T L S L Y C Q G  
UniRef90\_I9BRR1 P A H A A A L C G I A E D I E W L A A Q I G E T A V R R G E P V A I R V N Y G  
UniRef90\_D4E3Y4 D G T P K T A E W A A D I S G V D A E V L R Q L A R D M A K N R T M I M G W G  
UniRef90\_UPI00037ABB99 P E R V A Q Q S G I S P E Q M L K L A E T I H K G E R V S F W W T M G  
UniRef90\_M3UJP4 P E R V A E V T G L A V D D L R A V A Q M I V D A D E W V S L W T M G  
UniRef90\_UPI00046706E7 P E R V A A I T G L K V E D I R A A A D M V L A A G E F M T F W T M G  
UniRef90\_UPI00035DF04C P E N A P E A V E G V T G V P A E A L R G A A R L Y A T G N A A I Y Y G L G  
UniRef90\_C8WK53 P E L V E A I C G I D R R A D L V A A A K M Y A A D A A I M Y C L G  
UniRef90\_M3EW38 P D A V A I T G L P A D D I R E A A R L I G E A A E W T S C W T M G  
UniRef90\_A0LNF8 P E E R N S P A R A E E E T G I P A A E I T A L A R E L A E D K P A V A F H Y G  
UniRef90\_M7D1T9 P N I P T V A A K T G L S E S A V A E F Y G L W G R T H K V V T V Y S Q G  
UniRef90\_W6LV86 M E E Y A D S C G V S K E S I R E A A S L I S N A N G F L T L W A M G  
UniRef90\_I0XU44 P A K V S E I S G I P E D D I R A A A Q M I G E A D N F V S C W T M G  
UniRef90\_H8IT28 P E Y A Q S I C H I P A D T I R Q A A R Q Y A K A D S A A I L W G M G  
UniRef90\_H6LB59 Y S L V N A A S E I T G V N A E D I A A M A K M I G T A N K T A L Y Y A M G  
UniRef90\_Q087B8 E R H S P E A S E A T T G V A A D A V R R A R T Y A N A R N G A I Y Y G L G  
UniRef90\_W1N9V0 P V I A S R I C G I D A D M I K N V A R I Y A K A P S A M S I W T M G  
UniRef90\_I2JPF1 A R P E N S P E A T A E I T G V A A E L V R G A A R L Y A T G N G S I Y Y G L G  
UniRef90\_A9I094 S E V V A Q R C G I H D L E T A A R W W G T S E R V L S L W S M G  
UniRef90\_K8GNM6 P Q W A E Q Q T G I A H E I T S L J A R Q A S A V K P A V I F H Y G Y R  
UniRef90\_R4KEZ4 M K Y T P E Y A E K V T G I P A E T I R E V A R T F A A G S G A I M W G M G  
UniRef90\_G0HJD4 L A G I A A T G L S E D E L G R F Y S L F A A T A K T V T V Y S Q G  
UniRef90\_UPI00047CD7BB P Q W A E S Q T G I K A D E I I Q I A R E I S S F A P N C I I V P P R R  
UniRef90\_W0JJ08 D E D A L L T T C D I H P A R I D E I V E Y I S K P S R L L S F Y C Q G  
UniRef90\_UPI0003B55465 P E K A A G I C G V S A E M I R D V A R R L A S V K P A L L V Y T L G  
UniRef90\_A0LP28 L D Y V E K V T G V R K E D I I K L A E M I H S A N K V V A L W A M G  
UniRef90\_A0A031LS37 A Q P E N S P E A T E A V T G V P A E T V R Q A A R L Y A T G N A A I Y Y G L G  
UniRef90\_I9BST8 A D I I A A V A R A C K L A P Q D V Q A F Y E L F A A T T K V V T A F S M G  
UniRef90\_Q1LDU3 P E V V A R K C G I T V I E L E T A A R Y W A E S E R V L S L W S M G  
UniRef90\_Q51328 A L Q A A Q N D P S A P I G L A E A D I A F C A L W M R T E K I V T I Y S Q G  
UniRef90\_A3W033 A D E R H S P E A V A D V M G V P A A D V R H A A R L Y A K G R S A I Y Y G L G  
UniRef90\_I4Z4S7 L A Y A E K T G L S Q N E L R I A T M I H E A Q S V C I L W A M G  
UniRef90\_A0A015M5C6 D G I A K T P E W A S Q L T G I S V A R I Q I Q L A R E I G N A R A W I S Q W G  
UniRef90\_B4EZ02 P D R V A E I T G L A E A D I R T A A Q W I G E A G E W M S L W T M G  
UniRef90\_UPI000370A4D6 L E Y A E R M T G I T K E Q L T Y I A N T I A R A D K V C V C W A M G  
UniRef90\_UPI00040D2EAB L D Y A E E V T G I S K E Q L I E V A K M I H E A S G T C V L W G M G  
UniRef90\_Q1ZA48 D C T A K T P E R A E K I C G I Q A K A I Y T L A R E L G N A K A P I A Q G W G  
UniRef90\_D9TEZ9 P A E V E R L S G V P V A D L Y A T A R A L A T V D R A V V L T A R G  
UniRef90\_B4WQJ0 P E R V A E L C G I T V D E V E L V A K L W G E S N N V L S L W S M G  
UniRef90\_A7IL15 D E R H S P E A V E K Y T G V D P A L V R G A A R L Y A T G N G S I Y Y G L G





UniRef90\_C9Y3U7 G N R L F C A D P Y S V P N P V T A K I S I M N W V Q A C D D A A K V T P D N G R  
UniRef90\_B8FZB3 G P S V K T G N Y P I G T N P I K T K I S I F M W T D A T E R I L T K E Q D R  
UniRef90\_UPI00035FC605 Q G A S D F G A L P M Y M P G Y D E N E V R K R Y E E G W K V K L N T K P G L T Q  
UniRef90\_F4B6H4 Q G V S D F G C L P N Y L P G Y D E N E V I R K F E D S W G V K L L N R K P G L Q S  
UniRef90\_A4SXX4 M G G R E V G G S A H R D L A N P E H R A E V A N L W G V D S V P E K P G G L S A  
UniRef90\_UPI0003A65002 M G G R E N M L A A H M A L E N A E D C D R V Q R F W Q S P A L A R W P G F F K A  
UniRef90\_UPI0003F92519 H N T T A L Q R P D L M N G R P R T I N M N Q L  
UniRef90\_UPI000477B9E2 P F A A F P T L S N P V K T S I P M F L W T D A I T R H D E M T D K T D G G I R G  
UniRef90\_D1C157 Q G G R E V G Q K A N Q L P G Y R H I D V P E D R W G L P V E E M P K W E G A A A  
UniRef90\_A5V706 M G G R E V G G L A S H M G F A P D E V A R V G R F W S A P A V A T K P G L K A  
UniRef90\_F7Z050 Q G A C D M G T L P G W L P G Y Q H V A R E K F E K A Y D V K I S N K P G L N N  
UniRef90\_D1YYX0 Q G A C D M G A L P N V Y S G Y Q N V K M K E A W G C E I A P G K V G Y T V T D  
UniRef90\_UPI00035CAE63 Q G A S D A G L I P M F L P D Y K S V I R S Q F E N V W G A T I D P K R G L T V  
UniRef90\_Q46C84 Q G A C D M G C L P D V Y P G Y Q K V A D P E N H R K M E S I W G V S G L P K A  
UniRef90\_K8W5J3 G V E W F P M L D N P V K T Q I S V F T W T D A I E R G T E M T A I H D G  
UniRef90\_I4MR76 Q G A S D A G L I P M V L P D Y A R V R A E A L W H L A P G T L G T E P G L T V  
UniRef90\_B4DAA9 Q G G R E H G Q R C N Q L P G G R D I N K P E H R Q F I A D F W K P K Q G L T A  
UniRef90\_UPI00036DAD38 Q G A S D A G L I P M F L P D Y A Q P V G R E P I E A L W H Q K L D P V R G L T V  
UniRef90\_Q7X2P6 M G G R E V G G L A S T L A A H R Q D I A D V G R F W A A E R M A T K P G L K A  
UniRef90\_Q1J2V5 Q G A S D M G A M P N F V G G Y Q K A V R E K F A A R W G V E L P Q K A G L D N  
UniRef90\_F9MUL1 Q G A C D M G A L P T D Y T G Y Q P A V R E K M F E K A W N V H L Q N E P G L R I  
UniRef90\_UPI00037180DF Q G S C D M G S F P H E F P G Y R H V A D N A F E N V W G A T I D P K R G L T V  
UniRef90\_B4V884 M G G R E M G Y M G P G L P G Q R S V L V D G D R A F T E E L W G L E P G Q G T  
UniRef90\_I4YRW6 M G G R E N M L T A H R L D N S A S H R E L V R S F W N S P G L A T R P G L K A  
UniRef90\_D1A3S4 Q G G R E H P G Y R I D D P A A R A H V A A V W G V D P G L I P G P G R S A F  
UniRef90\_B8G227 C G S V R E T G A L S H L L P G H R V I A N E K H R K E V A E L W G V P A D R I  
UniRef90\_UPI00030A2AE5 Q K F P I P D N P L G I S I P C F K Y T D A I V R G K E M G A A D G V T G  
UniRef90\_UPI00040B7E24 H N A A L Q R P D L V K K Q T R V I N M N S L  
UniRef90\_E3G7Z4 T I E R M P V L E N P V K T S I S C F S W T D A I A R G P E M T K K R D G  
UniRef90\_C8VN82 Q G S C D M G M W P S L Y P G Y Q R V S D A A A W G V D E E R L S L K E G F K L  
UniRef90\_A0A059DP53 M G G R E V G G L A N Q L A A H M D F D E E S I R F W Q A P S I A S S P G L K A  
UniRef90\_D1AGJ3 Q G A C D M G G L P N V Y A P G Y Q N V N R R K F E K A W N S S L S D K T G L T A  
UniRef90\_UPI0004647760 T I E R M P V L E N P V K T S I S C F S W T D A I A R G P E M T A T R D G  
UniRef90\_A9BF64 Q G A C D V G A L S D V Y P G Y Q K V S D P K I R E K F E N Y W G T D R E G L T  
UniRef90\_A4TRR7 Q G A C D M G V L P N T F P G Y E K V R A R F A H A W G V A E L P A H V G Y S I  
UniRef90\_C8WL81 F Y F S S F S V P S D K N P V Q T S I A T F T W T D A I D H G T E M T K L A H  
UniRef90\_E8V3P9 F N G A R L E M P E L M R A S P L R R D A R V V N M S Q L G H A L T E  
UniRef90\_S3UPY0 M G G R C N I L P A H R E L S N P E H R K E V A E F W G V D S V P A E P G F S A  
UniRef90\_UPI00047E1F31 Q G G R E H G Q K S D L L P G Y R H V E E V C Q V W G L T P D E M P K P G V S A  
UniRef90\_L0M2U9 Q G A C D M G V I P N Q F P G Y Q D V V D A D V R A K F A K A W D P K V G V R I  
UniRef90\_W0UZ78 V N R A A L Q R P D L L K N K P R T I N M S T I G D D L  
UniRef90\_H0HZM8 M G G R E N M L A P H M E L E N P L H R D R V R F W N A P A V A E K P G L K A  
UniRef90\_UPI0002556D6A Q G S C D M G S F A H E L P G Y R H A V R N E F E A A W N V S L Q P D P G L R I  
UniRef90\_I0XN62 M G G R C N I L P A H R D M E N P E H R K E V A K F W G V D S I S G T P G Y S A  
UniRef90\_G8ND99 Q G A G D M G A L P D V Y P G Y R S L K V G E A R K R F E A L W G V P L S P T P G L  
UniRef90\_Q023D2 Q G G R E H G Q K C D Q L P G Q R S L T D P A A R A H V A G V W G P P G Y T A  
UniRef90\_C7Q4T2 M G G R E M G Y M G P G M V P E E R A F V E E L W N V P A G T L R A E A G Q G T  
UniRef90\_A7K229 Q G A C D M G A L P N C Y P G Y P I V R R Q K F A I E W D A P N L P S E Q G L T L  
UniRef90\_UPI000375BFEE M G G R E M G Y M G P G L P G Q R V R F A E D V W G L P A G T I R A D A G G G T  
UniRef90\_Q2WB01 Q G A S D A G L I P M M L P D Y G R V V R Q R F E A G W G V E L D P D S G L T V  
UniRef90\_UPI00047C0F8E M G G R E V G G S A H R D L A N P Q H R A E V A A L W S V P S V P E K P G K T A  
UniRef90\_I9BRR1 F P S I D M R T L Q R M D L L P T W P A L P R T I N M V T I G D A L  
UniRef90\_D4E3Y4 G S P T A K G G I I A G I S A G N A P K P S P I P V A R I A E C L A N P G K T I  
UniRef90\_UPI00037ABB99 M G S R L F S N T T N L L G G H D F A N E A H R E G V G A E N I T K E L G W T Y  
UniRef90\_M3UJP4 M G G R E M G Y M G P G L P G Q R T A L V E S V W G L P G T L R S D P G G G T  
UniRef90\_UPI00046706E7 M G G R E M G Y M G P G L P G Q R S A L V E V D R R Y C E E Q W G L E P G T I T  
UniRef90\_UPI00035DF04C Q G S C D M G S F P H E F P G Y R H V V R G V F E R E W G L S L D N E P G L R I  
UniRef90\_C8WK53 Q G A C D M G A G P D D L P G Y Q K V V V R R F E K A W G A L P R A R G I K A  
UniRef90\_M3EW38 M G G R E M G Y M G P G L P G Q R S V L V D E E R A F V E E L W E L A P D S L T  
UniRef90\_A0LNF8 Y G G K Y A A Q S F P K I A G P R F D G S G S T F P L A D P A H G N P Q A L A  
UniRef90\_M7D1T9 Q G S C D M G S F P H E L P G Y Q H V A R G R F E A V W G V P L N D S E P G L R I  
UniRef90\_W6LV86 M G G R E V G G L A S H M D F A P E A V E R V R R F W K A P A I A S R P G L K A  
UniRef90\_I0XU44 M G G R E V G G L C N L L P A H R N H R K E V A D F W G V E S V R D K P G Y S A  
UniRef90\_H8IT28 M G G R E M G Y M G P G L P G Q R S V A S A E L W G V P R G T L R T E V G T G T  
UniRef90\_H6LB59 Q G G C D M G A L P N C Y P G Y Q D V T D I I R E K F E K A W I P L T Q V P Q  
UniRef90\_Q087B8 Q G A C D M G A L P N Y Y P G Y Q Q V D V K F A K A W G N T S L N S E L G L A A  
UniRef90\_W1N9V0 Q G S C D M G S F P H E L P G Y Q H V A R G R F E A V W G V P L N D S E P G L R I  
UniRef90\_I2JPF1 M G T R E W S S C S G L P G Y R A L E K Q E H R D E V A K F W G I D E S F F P A  
UniRef90\_A9I094 Q G S C D M G S F P H E L P G Y R H V V R A Q F E A D W G V T L Q P E P G L R I  
UniRef90\_K8GNM6 M G G R E V G G L C N L L P G Y R H V M V E Q F W G L P G Q I S G S W G R T A  
UniRef90\_R4KEZ4 K K P L N K L I G Q P E I N E V R C D G A G T A K L P T P D P A H G V V I Q M L  
UniRef90\_G0HJD4 Q G A Y M G A L S E F L P G Y V P L T D R F R L W G V E D L P T E R G L Y L  
UniRef90\_UPI00047CD7BB M G G M A N M L A A H M E I E N P E H R D R V R R F W N A P S V A E K P G L K A  
UniRef90\_W0JJ08 A D M P D V E E S K Y A Q L A Q Q R N A A N A V N T T Q E I V G V L G L D N V L  
UniRef90\_K9DA51 M G G R E N M L A A H L D L D N A G H R E A V R S F W G A P R I A D K P G L K A  
UniRef90\_UPI0003B55465 M G G R E V G Y L S H Q L P G Y R V V T N G R V F W G L P G S I D P K P G L T A  
UniRef90\_A0LP28 Q G A C D M G A L P N L F P G Y Q R V D E K F K A A W N V A S L P D R P G I M L  
UniRef90\_A0A031LS37 Q G A S D F G A L P N Y L P G Y D A K G R E I F E N A W K C K I N E K P G L T S  
UniRef90\_I9BST8 Q G S C D M G S F P H E L P G Y R H V V R Q Q F E A A W G V T L D A E P G L R I  
UniRef90\_Q1LDU3 M G G R E N M L A A H M E L G D P R H R D I V Q D F W H S P A M A D K P G L K A  
UniRef90\_Q51328 M G G R E A G G L S H L L P G Y R V V K V E K F W G L P V G R T A P E R G L T V  
UniRef90\_A3W033 M G G R E N M L A C H L D L E N A D H R S V V R G F W G A P L P E A P G L K A  
UniRef90\_I4Z4S7 Q G S C D M G S F P H E F S G Y R H V S D D A F E A F W G V G L S G E P G L R I  
UniRef90\_A0A015M5C6 Q G A C D F G T M P A W F P G Y D E K I R A K Y E K A W G V S L P P D P G Y N N  
UniRef90\_B4EZ02 P V A S F A I P N P V K T Q I P T F M W S E A V A R G E E L T S K N A  
UniRef90\_UPI000370A4D6 M G G R E M G Y M G P G L P G Q R S V L T E A A W G L A P G T I R D E T G P G T  
UniRef90\_UPI00040D2EAB Q G G S D F G S M P N F L V G Y D D V A R E R Y E Q L W G V S I S H K K G K D N  
UniRef90\_V6MBL6 Q G A C D M G T L P N W L P G Y Q H V A R K F E K A Y G T E L P S T P G W T N  
UniRef90\_Q1ZA48 F K S T D I T K M P L G E N N V K A K L P C F K W L E A I E R G Q E M T S K T D  
UniRef90\_D9TEZ9 M G G R E H P G Y R R I D D P A A R E H V A G V W G V D P D S L P G P G V P A Y  
UniRef90\_B4WQJ0 Q G G R E A G G L A H I L P G Y R S V K N A H R R T L E K A W Q P E P G M A A  
UniRef90\_A7IL15 Q G S C D M G S F P H E L P G Y R H V S D D A F E A L W G V P L D D E P G L R I

UniRef90\_C9Y3U7 L K D A E T L S S N I K F I F N L A G N Y L A N Q N P D I N Q T V K D E S K V E E  
UniRef90\_B8FZB3 I E G A D K T K S T I K M I I N Y G G N T L I N Q H S D S G R T T A K D D S K Q L E  
UniRef90\_UPI00035FC605 T E M I D A I G F V E G K K A L L I F G E D T K V L A D S G N T Q R T T K Q A L L E K Q L V D  
UniRef90\_F4B6H4 L Q M I E A V L F E G K I K A L Y I V G E D T V M V D C D L N A V V H E G L S K A E  
UniRef90\_A4SXX4 I P M F E A L R T E K L K A I W I V C T N P A Q S M P D L N A V V H E G L S K A E  
UniRef90\_UPI0003A65002 V D M F R A V A D G R V S K A L W I M A T N P V V S M P D A N D A V A A A L A A C P  
UniRef90\_UPI0003F92519 G S A L L E M E K P I R K F I W N Y A G N C T I N Q H A D T N R T H Q D D S K L E  
UniRef90\_UPI000477B9E2 A E R L S Q P I K F I W N Y A G N C T I N Q H A D T N R T H Q D D S K L E  
UniRef90\_D1C157 T E M V G L M A K G G E I K S C L V L C S N L M V S L P N V E V V R D A L R A T N L D  
UniRef90\_A5V706 V D M F R A I G E G R I K A L W I M A T N P A V S M P D A G R V R D A L R A T N L D  
UniRef90\_F7Z050 I E M L H E I A A G Q L K A M Y I T G E N D M A L V D S D A N H V V S E E L S N L D E  
UniRef90\_D1YYX0 A I N V L C D S P K K L K A I Y I T G E N P M V S D P D L H H V R K A L K N L E  
UniRef90\_UPI00035CAE63 V E I M D A I H E D K I H G M Y I M G E N P A M S D P D Q L H H A R A A L A K L E  
UniRef90\_Q46C84 P G L T V T E L M E Q V K C M Y V M G E N F M L S D P D L N K V R K A M K Q L D  
UniRef90\_K8W5J3 I K G K D K L D V P I K F L W C Y A S N T L I N Q H S D I L A R T H Q D D S K L E  
UniRef90\_I4MR76 V E I I D A A Y R G D I T A M L I Q G E N P A M S D P D A T H A R E A L A K L E  
UniRef90\_B4DAA9 C E I I D A I E R G E I K G L L S T S I N P L V S I P D S N R T R A A L A K L E  
UniRef90\_UPI00036DAD38 V E I M N A I H A G E I R G L Y V E G E N P A M S D P D L Q H A R G A L A M L D  
UniRef90\_Q7X2P6 V D L F R A V I G E G R I K A L W I M A T N P A V S M P D A G R V R D A L A A C P  
UniRef90\_Q1J2V5 H E M V D A I Y Q G T L K A M Y L K G E E M G I V D S D A N Y V D A A F E R L D  
UniRef90\_F9MUL1 V E I L N A V D E G E L N F M Y I M G E N P I L S D P D Q N H T K R A L T A K L D  
UniRef90\_UPI00037180DF P N M F E A A L D G E F R G I Y I E G E D I A Q S D P N T Q H V T A A L T A M E  
UniRef90\_B4V884 V E M F R R L A D G E I K A C W I T C T N P V A S V A N R K T V I E G L E A A E  
UniRef90\_I4YRW6 V D L F R A V G E G R I K A I L W I M G T N P A D S L P D A D A D A I Q E R L N S C P  
UniRef90\_D1A3S4 E L L E A L G T E H G P K A L L L F G S N P V V S L P P R S R R I E E R L R S L E  
UniRef90\_B8G227 M E L F K A C G D G R V K C L Y V M C T N P A H S L P N V N A Y Q E G F E K V F  
UniRef90\_UPI00030A2AE5 G E E G Q T L P S N I K V M S I Y N M A G N C L V N Q H S D I N K T I Q E I L R D C E  
UniRef90\_UPI00040B7E24 Q E A L L D E K Q P I K R S I Y N M A S S N P A V V A P E G N K V R Q E G L R E D L  
UniRef90\_E3G7Z4 V R G K D K L D V P I K F I W N Y A G N T L T N Q H S D I N K T H Q D D S Q L E  
UniRef90\_C8VN82 T D L P H G V A E G T I R A F Y N F G E D P L Q T E P D T A Q M R A T E A G L D  
UniRef90\_UPI00059DP53 V D M F D A V A D G R I K A I W I M A T N P V V S L P D A D A Q V R R A L A C P  
UniRef90\_D1AGJ3 S E M I D S A E K N L K A L Y I T G E N P V V S E P D S S H T E K A L K N L D  
UniRef90\_UPI0004647760 V R G K A K L D V P I K F I W N Y A G N T I I N Q H S D I N R T H K Q D D K Q C E  
UniRef90\_A9BF64 L T E M F E A G K P I K A L Y I M G E N P F L S D P D Q D H V K A D L E S L D  
UniRef90\_A4TRR7 T D V P H K V A E G K L K A Y Y V F G E D P I Q T E P D L A A M R A A F A L D  
UniRef90\_C8WL81 G V R G K D K L D V P I K M I F N Y A G N T I T N Q H R T H E L Q D E S K C E  
UniRef90\_E8V3P9 L N E P R I H A M F V Y N S N P A V I A P N Q S D V L R G E R R R D D  
UniRef90\_S3UPY0 V E M F D S L R S G K M K A V W I V C T N P T V S L P D A R T V I E S A L R T A E  
UniRef90\_UPI00047E1F31 V E M F Q L L M E Q K T R A L Y L L C G S N P A V S A P N Q N F I R K A L M S L D  
UniRef90\_L0M2U9 L E V P H L A J E G K V K A Y Y I M G E D P L Q T E A D L G L V R K G F E A L D  
UniRef90\_W0UJZ78 L R E S S S A F G P K V E A V I V Y N S N P L A V A P D S S K V E Q G F A R E D  
UniRef90\_H0HZM8 V D M L R A V A D G R I K A L W I M A T N P V D S M P D A D A D A V A A L K A C P  
UniRef90\_UPI0002556D6A P N M F E S A L D G S F K A L Y C Q G E D I A Q S D P N T Q H V T A A L S A M E  
UniRef90\_I0XN62 T E I F E K L A S G R M K A I W I T C T N P A V S L P D V R A A E A S G L R L A E  
UniRef90\_G8ND99 R M T E V F Q A I P K V I E A I Y L I G E D P V T S E P Y Q D H L K A Q L E A L P  
UniRef90\_Q023D2 V E I M N A I H S G E I K A G L L S I C F N P L V S L P D A N F T R E A L E K L E  
UniRef90\_C7Q4T2 V E M F G E M A A G R I K A C W I I C T N P V A S V A N R K T V I A G L E A A E  
UniRef90\_A7K229 T E I I D A A C K R E V R G M Y I M G E N P V L S D P N Q A H V I E G L A A D  
UniRef90\_UPI000375BFEE V D L F A R M A A G D V K A C W I T C T N P A A T V A N R K N V I A G L Q A A E  
UniRef90\_Q2WB01 V E M M D A A Q A G I I R G L Y V E G E N P A M S D P D L A H A R Q A L A G L E  
UniRef90\_UPI00047C0F8E V E M F Q A A A D G E I K A L W I A C T N P A Q S M P D Q A T V R R A L R A E  
UniRef90\_I9BRR1 L H P G D A K F G P K I E A V V Y N S N P V A V A P E S G R V A G F A R E D  
UniRef90\_D4E3Y4 H F N G A D V T Y P E V K M V Y V A G G N T F H Q H Q D T N N L I K A W Q R P E  
UniRef90\_UPI00037ABB99 D Q I V D G L H A G K I K G L W L A T N G S H S W I Q Q D K Y S E A M E K L D  
UniRef90\_M3UJP4 I D M F E R M A A G E I R A A W I I C T N P V A S V A N R Q T V I D A L E R A D  
UniRef90\_UPI00046706E7 I A M F E A M A A G A L R A A W I I C T N P V A S V A N R K T V T A L E R A E  
UniRef90\_UPI00035DF04C T N M I D A A I A G S F K A L Y I Q G E D L Q Q S D P N I K H I A A G L E A M D  
UniRef90\_C8WK53 T E C F P A M I E G G I K G L F L F G E D P V R T D P D T H H V I R S L E A L E  
UniRef90\_M3EW38 V E M F R K M A D G E I K A C W I I C T N P V A S V A N R R T V I E G L E A A E  
UniRef90\_A0LNF8 Q A L L E S E Q Y P I K A L I A N R F E P L Q S L P D A S A T R E A L D K L D  
UniRef90\_M7D1T9 P N M F D A A I A G T F K A M Y V Q G E D I A Q S D P N T Q H V I E A A L T S L D  
UniRef90\_W6LV86 V E L F Q A V A D T K I K A L W I M G T N P L V S L P D A D A A R E A A L R R C P  
UniRef90\_I0XU44 T E M F E N L K N G K M K A I W I V C T N P T V S L P D A R T V I E A G L R N A E  
UniRef90\_H8IT28 I D M F S R M A A G Q I K A C W I V C T N P V A S V A N R K T V I A G L E R A E  
UniRef90\_H6LB59 Y V L H E K D E K K K I R A Y Y I F G E D P G Q S D P D L N D M R K A L D A L E  
UniRef90\_Q087B8 T E I M Q A I V K G K L D A L Y V L G E D P V L S D P D Q A H V I A A L S K I L E  
UniRef90\_W1N9V0 P N M F D A A I E G S F K A L Y V Q G E D I A Q S D P N T Q H V I E A A L T S L E  
UniRef90\_I2JPF1 K D I F P A I E S G E I K A L W I V A T N P L T S M P N Q P R I K A A L E K L E  
UniRef90\_A9I094 A N M F D A A M A G S F R G L Y C Q G E D L V Q S D P D T Q H V I A A A L A M E  
UniRef90\_K8GNM6 W E M I T G L E T G E V G L L W V J A T N P V V S L P D L E R V K A A L V R S P  
UniRef90\_R4KEZ4 P R A I L E E D P Y P V K G L I V W R H D P L L S I P D Y E N N K R A F D K L D  
UniRef90\_G0HJD4 T E L W E A I E S S D I K A L Y I V G E N P A V S E A D F V R V R N A L R K L D  
UniRef90\_UPI00047CD7BB V D M F Q G V A D G R I K A L W I M A T N P V D S M P D A D A V E A A I K A C P  
UniRef90\_W0JJ08 W E A I R T Q K P Y P I K A M I S Y G T N P L F H N G D S N K I K E A I N K L D  
UniRef90\_K9DA51 V D L F R A V A E A G K V K A V W I M A T N P V V S M P D A D Q V R R A L A A C  
UniRef90\_UPI0003B55465 V P M F E A A A D G K V R A L W I A C T N P A V S M P D T K V S Q E G L R R A D  
UniRef90\_A0LP28 P Q M L D G L A D G K I K A F Y I F G E N L A N S E P D I K H V I E H C L S S A E  
UniRef90\_A0A031LS37 T E M I E E A L D G K L K A M I I G E D K V L A E A N S E K V I E A L K K L E  
UniRef90\_I9BST8 P N M F E A A L D G S Y R G M Y I E G E D I V Q S D P N T Q H V I E A A L R A M E  
UniRef90\_Q1LDU3 V D L F Q A I E Q G K V K A V W V I A T N P V V S L P D A D Q A R K A A L A R C  
UniRef90\_Q51328 W E M L L G L E M G K V G L V W I A A T N P A V S M P D L E R T K K A L S R S P  
UniRef90\_A3W033 V D M F R A V G D G R I K A L W I I H T N P A V S M P E A D A V R D A I A A C P  
UniRef90\_I4Z4S7 P N M L D E A V I S G S F K A L Y I Q G E D I A Q S D P D T Q H V I T A G L R A M E  
UniRef90\_A0A015M5C6 H Q M I E G I H K G E L K A M Y L F G E E M A L V D S D A N H V H E A F N K L D  
UniRef90\_B4EZ02 G V I R N K D K L D T G I K F M W C Y S N V I G N Q H A D L N K T H Q D E S K C E  
UniRef90\_UPI000370A4D6 I E M F R E L A A G K I K A C W V V C S N P V A T V A N R R N V I A G L E A A E  
UniRef90\_UPI00040D2EAB H E M V D S I H E G T L K G L Y I V G E D T G L V D A N I N Y V T E D A F D K L E  
UniRef90\_V6MBL6 I Q M L Q A A E R G E L K G M Y I V G E D M A W V D S N S H V V Q E T L G K L D  
UniRef90\_Q1ZA48 G I K G V D K L D S D V K C I F V Y Q G N W L I N Q H S D C K I I K D E E N V E  
UniRef90\_D9TEZ9 Q L L D A L L G T P S G A R A L L V F G S N P V V S A P R A A R V T E S R L R A L D  
UniRef90\_B4WQJ0 W D M I L G L E R E S V G I L W I A A T N P A V S M P D I K R T Q A A L K S P  
UniRef90\_A7IL15 P N M F D A A V D G T F K G L Y V Q G E D L Q S D P D T K H V I S A G L A G L E

UniRef90\_C9Y3U7 F I V V S D L F L T P S A R Y A D L L L P E T S F M E R W N I G E T W G T G N Y  
UniRef90\_B8FZB3 F I L G M D N F M T P S M R Y C D I V L L P G V T Q F E V N D M I T R S M G H G  
UniRef90\_UPI00035FC605 L L V V T E I F M T Q T A S L A A H V V L P A A A S V I E K D G T F V N T E R  
UniRef90\_F4B6H4 F V V V Q D M F M T E T A K L A D V I L L P A A A S L E K D G T F V N T E R  
UniRef90\_A4SXX4 F V V V Q E Y A H T A T T L Y A D V I L L P A T T W A E K V G T V T N S E R  
UniRef90\_UPI0003A65002 F V V V S D V Q D T D T T K L A H V L L P S L G W A E K D G T F Y T N S E R  
UniRef90\_UPI0003F92519 F T I V H D L F L T E T A M Y A D I V L L P A T S A F E N T D F Y T S S Y W H H  
UniRef90\_UPI000477B9E2 M I V V I D N H M T A S A R Y A D I L L P D L T A A E Q P D F A P N G S C G N M  
UniRef90\_D1C157 P L V V I D F F M S E T A E Q A D V V L L P G S V W C E K D G T T T N L E G R  
UniRef90\_A5V706 F V V V S D V M D T D T G R F A H V R L P A A A W A E K D G T V T N S E R  
UniRef90\_F7Z050 F L V V Q D V F F S R T A Q Y A D V V L P A A P S L E K E G T F T N T E R  
UniRef90\_D1YYX0 F L V V Q D I F L T E T A Q L A D V V L P A S C F A E K D G T Q T N T E R  
UniRef90\_UPI00035CAE63 H L V V Q D I F L T E T A N L A D V V L P A A C Y A E K N G T Q T N T E R  
UniRef90\_Q46C84 F L V V Q D I F L T E T A N L A D V V L P A A C Y A E K N G T Q T N T E R  
UniRef90\_K8W5J3 M I V G I D H F M T A S A K Y C D I L L P D L M P T E Q E D L I P S E S T A G N M  
UniRef90\_I4MR76 H L V V Q D I F L T E T A A A L A D V V L P A T A W P E K T G S V T N T  
UniRef90\_B4DAA9 F F A C I D F F L S E T A R Y A D V V L A G S L Q E E D E G T V T T G E G  
UniRef90\_UPI00036DAD38 H L V V Q D I F L T E T A F H A D V I L L P A S A F A E K V G T F T N T D R  
UniRef90\_Q7X2P6 F V V V S D V I Q T D T S V H A H V R L P A A A W G E K D G T V T N S E R  
UniRef90\_Q1J2V5 F F V V Q D V F F S H T A S F A D V V L P A A P S L E K E G T F T N T E R  
UniRef90\_F9MUL1 F L V V Q D I F L T E T A E Y A D V V L P A A S F A E K D G T F T N T E R  
UniRef90\_UPI00037180DF C V V V Q D L F L N E T A K F A H V F L P G S S F L E K D G T F T N A E R  
UniRef90\_B4V884 F V I T Q D F A E T E T N A Y A D V V L P A A L W T E T E G V M V T N S E R  
UniRef90\_I4YRW6 F V V V S D V T R T D T T R H A H V L L P A A A W A E K S G T V T N S E R  
UniRef90\_D1A3S4 F L A V S D F V L S E T A R R A D V V L P T T Q W A E E S G T L T N L E G R  
UniRef90\_B8G227 L V V A E A F H P T A T T K Y A D V V L P A A F W C E K E G V Y G N T D R  
UniRef90\_UPI00030A2AE5 F L V T S D I L Y M T P S A K Y S D I V L L P T C T F F E Q N D L V P P W G S G H H  
UniRef90\_UPI00040B7E24 F T I V H D L F L T E T A A Y A D I V L L P A A S S F E S T D F Y T S Y W Q H H  
UniRef90\_E3G7Z4 M I V V I D N F M T S S A K Y A D I L L P D L M T V I E Q E D I I P N D Y A G N M  
UniRef90\_C8VN82 L V I S Q D I F M T Q T T A L A D V V L P A T S W A E H D A V Y T A S D R  
UniRef90\_A0A059DP53 V V V S E V S T S D T A A L A D I V L L P A T G W G E K S G T V T N S E R  
UniRef90\_D1AGJ3 F L I V I Q D I F M T E T A K L A D V I L L P A S S F A E K N G T F T N T E R  
UniRef90\_UPI0004647760 M I V V I E N F M T S S A K Y A D I L L P D L M T V I E Q E D I I P N D Y A G N M  
UniRef90\_A9BF64 F L I V Q D I F L T E S A Q F A D V V L P A A S F A E K E G T F T N T E R  
UniRef90\_A4TRR7 L V V V Q D I F M T K T A E L A D V V L P A T S W G E H E G V Y T S A D R G  
UniRef90\_C8WL81 F L V V W E T F M T D S A K Y A D V I L L P D L M P V I E Q S N F V S N D Y A G N M  
UniRef90\_E8V3P9 F T I V H D Q T F T D T A D Y A D I L L P A P S F L E Q S D V Q G S Y G H Y  
UniRef90\_S3UPY0 F V V V Q D I S K D S A A P F D V V L P A A G W G E K E G T M T S S D R  
UniRef90\_UPI00047E1F31 F M V C A D F Y L S E S A E Y A D V V L P S V T W S E D E G T V T N L E G R  
UniRef90\_L0M2U9 F V V V Q D I F L M T K T A E Q A D V V L P A T S W G E H G G V F T C A D R  
UniRef90\_W0UZ78 F T V V M E H F Q T D T V D Y A D I V L P A T T Q L E H V D A H L A Y G H L  
UniRef90\_H0HZM8 F V V I S D V S A E D T I R H A H V K L P A A A W G E K D G T V T N S E R  
UniRef90\_UPI0002556D6A C I I V Q D I F L N E T A K F A H V F L P G S S F L E K D G T F T N A E R  
UniRef90\_I0XN62 F V V V Q D I S A D S S V I P F D V V L P A A G W A E K K G T M T S S D R  
UniRef90\_G8ND99 F L I V Q D I L E N E T T P L A D V V L P A A S F L E E K E G T F T N T D R  
UniRef90\_Q023D2 F F A V I D F F L S E T A A H A D V V L A G S L Q E E E G V T A N V A  
UniRef90\_C7Q4T2 L V I T Q D V F D T E T A N A Y A D I A L P A A L W A E A E G V M V N S E R  
UniRef90\_A7K229 F L V V Q D I F L T E T A Q Y A D V I L L P S C S F A E K S G H F T N T E R  
UniRef90\_UPI000375BFEE V V I V Q D A F L D E T N R Y A D I V L L P G A L W A E A E G V M I S F T N T E R  
UniRef90\_Q2WB01 H L V V Q D I F L T E T A M L A D V V L P A S S F F E K T G S F T N T D R  
UniRef90\_UPI00047C0F8E F V V V Q E A F A T A T C A Y A D L L L P A T T W G E K D G T V T N S E R  
UniRef90\_I9BRR1 F T I V L E H F Q T D T A D Y A D I L L P A T T Q L E H V D I H K T Y G H A  
UniRef90\_D4E3Y4 T I V V N E P Y W T A T A K Y A D I V L L P A T T S Y E R N D L E M G G D Y S Q L  
UniRef90\_UPI00037ABB99 F L V V Q D M Y S T E T A Q Q A D I V L L P A A G W A E K D G V F I T N S E R  
UniRef90\_M3UJP4 L V I V Q E V F T T E T A E Y A D I V L L P A A L W T E A E G V M V N S E R  
UniRef90\_UPI00046706E7 F V V V Q D Y A E T E T T P Y A D I L L P A A V S F E A D G V M V N S E R  
UniRef90\_UPI00035DF04C C V I V Q D L F L N E T A S Y A H V F L P G S T F L E K D G T F T N A E R  
UniRef90\_C8WK53 F F V V D D L F M T E T A K Y A D V I L L P G R S Y A E K E G T F T N T E R  
UniRef90\_M3EW38 F V V T Q D V F D T E T N A Y A D V V L P G A L W T E S E G V L V N S E R  
UniRef90\_A0LNF8 L L V S I D I F M N E F A W C A D V V L P E S M Y L I E R G D S I Q A V S G L K P  
UniRef90\_M7D1T9 C L I V Q D I F L N E T A K Y A H V V L P G S T F L E K N G T F T N A E R  
UniRef90\_W6LV86 L V I V S D V A D N D T V R L A Q L K L P A L T W G E K E G A V T N S E R  
UniRef90\_I0XU44 L V V V Q D I L N Q H E S I P F A H Y V L P A A G W T E K Q G T M T N S D R  
UniRef90\_H8IT28 L V M V Q D A F L N E T T E Y A D V V L P A A L W A E S E G V M V N S E R  
UniRef90\_H6LB59 F V V V Q D I Y M N K T G L K A D V I L P A T A W G E H E G V C T C A D R  
UniRef90\_Q087B8 F M L V Q D I F L T E T A Q M A H V V L P A T A F A E K D G H F T N T E R  
UniRef90\_W1N9V0 C L I V Q D I F L N E T A K Y A H V L L P G S S F L E K D G T F T N A E R  
UniRef90\_I2JPF1 F M V V Q D Y K D C E T V N F A H V Y F P A A V W G E K E G V L T N T E R  
UniRef90\_A9I094 C L I V Q D L F L S E T A K Y A H V F L P G S S F L E K D G T F T N A E R  
UniRef90\_K8GNM6 F T I C Q D Y Y P T E T A E Y A H V L L P A A Q W G E K T G T M T N S E R  
UniRef90\_R4KEZ4 F I V T I D I H F S E T A W Y S D V I L P E S I Y L I E R G D S I Q E N A G L K P  
UniRef90\_G0HJD4 L L V V Q D I F M T R T A R Y A H V V L P A S A F C E K E G S Y M N S E R  
UniRef90\_UPI00047CD7BB F V V V S D V L A T D T V R H A H V R L P A A A W G E K D G T V T N S E R  
UniRef90\_W0JJ08 F Y M V V D I L P W E H T L Y A D I V F P E S T Y L I E K Y D A L K S I S W K Y P  
UniRef90\_K9DA51 L V V V S D V V N T D V J A P Y A H V L L P A A L A W G E K D G T V T N S E R  
UniRef90\_UPI0003B55465 L V I V Q D C Y Y P E T A E Y A D V V L P A A Q W G E K Q G T M T N S E R  
UniRef90\_A0LP28 F L I C Q D N F P N E T T R F A D V I L P A A A W S E N D G T F A S S E R  
UniRef90\_A0A031LS37 L L V V V D L F M T R T A K L A H V V L P A A A S I E R E G T Y V N T E R  
UniRef90\_I9BST8 C V I V Q D I F L N E T A K F A H V F L P G S S F L E K D G T F T N A E R  
UniRef90\_Q1LDU3 L V V T S D I L T R T D T N D A A H I L L P A L G W G E K D G T V T N S E R  
UniRef90\_Q51328 F T V V S Q D Y Y P T E T A N Y A H V L L P A A Q W S E K T G V M T N S E R  
UniRef90\_A3W033 F T V V S D I T D Q D T A R L A D V V L P A T A W A E K D G T V T N S D R  
UniRef90\_I4Z4S7 F V V I Q D I F L N E T A K Y A H V F L P G S S F L E K D G T F T N A E R  
UniRef90\_A0A015M5C6 F F V V Q D I F F T K T A Q F A D V V L P A A P S L E K D G T F V N T E R  
UniRef90\_B4EZ02 F I L V W D N H M T P S A K Y A D I L L P D V T T V E T N D L I N Y A S G A Y H  
UniRef90\_UPI000370A4D6 L V I V Q D Y T E T A T T A Y A D L L L P A T L W S E S D A V M V N S E R  
UniRef90\_UPI00040D2EAB F L I V Q D L F L T K T A E Q A D V V F P A C S L E K E G T F T N T E R  
UniRef90\_V6MBL6 F F V V Q D V F F T K T A Q F A D V I L P A A P S L E K D G T F T N T E R  
UniRef90\_Q1ZA48 F I F V M D N F M T A S A K F A D I L L P D I T W L I E N S R I V K F S T  
UniRef90\_D9TEZ9 L L V V A D F Y R S E T A E L A D V V L P V A Q W A E D G T M T N L E G  
UniRef90\_B4WQJ0 F T I V C Q D Y Y P T E T A F A H M V L P A A Q W G A D G V M T N S E R  
UniRef90\_A7IL15 C L I V Q D I F L N E T A N Y A H V F L P G C S F L E K D G T F T N A E R

UniRef90\_C9Y3U7 UniRef90\_B8FZB3 UniRef90\_UPI00035FC605 UniRef90\_F4B6H4 UniRef90\_A4SXXK4 UniRef90\_UPI0003A65002 UniRef90\_UPI0003F92519 UniRef90\_UPI000477B9E2 UniRef90\_D1C157 UniRef90\_A5V706 UniRef90\_F7Z050 UniRef90\_D1YYX0 UniRef90\_UPI00035CAE63 UniRef90\_Q46C84 UniRef90\_K8W5J3 UniRef90\_I4MR76 UniRef90\_B4DAA9 UniRef90\_UPI00036DAD38 UniRef90\_Q7X2P6 UniRef90\_Q1J2V5 UniRef90\_F9MUL1 UniRef90\_UPI00037180DF UniRef90\_B4V884 UniRef90\_I4YRW6 UniRef90\_D1A3S4 UniRef90\_B8G227 UniRef90\_UPI00030A2AE5 UniRef90\_UPI00040B7E24 UniRef90\_E3G7Z4 UniRef90\_C8VNN82 UniRef90\_A0A059DP53 UniRef90\_D1AGJ3 UniRef90\_UPI0004647760 UniRef90\_A9BF64 UniRef90\_A4TRR7 UniRef90\_C8WL81 UniRef90\_E8V3P9 UniRef90\_S3UPY0 UniRef90\_UPI00047E1F31 UniRef90\_L0M2U9 UniRef90\_W0UJZ78 UniRef90\_H0HZM8 UniRef90\_UPI0002556D6A UniRef90\_I0XN62 UniRef90\_G8ND99 UniRef90\_Q023D2 UniRef90\_C7Q4T2 UniRef90\_A7K229 UniRef90\_UPI000375BFEE UniRef90\_Q2WB01 UniRef90\_UPI00047C0F8E UniRef90\_I9BRR1 UniRef90\_D4E3Y4 UniRef90\_UPI00037ABB99 UniRef90\_M3UJP4 UniRef90\_UPI00046706E7 UniRef90\_UPI00035DF04C UniRef90\_C8WK53 UniRef90\_M3EW38 UniRef90\_A0LNF8 UniRef90\_M7D1T9 UniRef90\_W6LV86 UniRef90\_I0XU44 UniRef90\_H8IT28 UniRef90\_H6LB59 UniRef90\_Q087B8 UniRef90\_W1N9V0 UniRef90\_I2JPF1 UniRef90\_A9I094 UniRef90\_K8GNM6 UniRef90\_R4KEZ4 UniRef90\_G0HJD4 UniRef90\_UPI00047CD7BB UniRef90\_W0JJ08 UniRef90\_K9DA51 UniRef90\_UPI0003B55465 UniRef90\_A0LP28 UniRef90\_A0A031LS37 UniRef90\_I9BST8 UniRef90\_Q1LDU3 UniRef90\_Q51328 UniRef90\_A3W033 UniRef90\_I4Z4S7 UniRef90\_A0A015M5C6 UniRef90\_B4EZ02 UniRef90\_UPI000370A4D6 UniRef90\_UPI00040D2EAB UniRef90\_V6MBL6 UniRef90\_Q1ZA48 UniRef90\_D9TEZ9 UniRef90\_B4WQJ0 UniRef90\_A7IL15

UniRef90\_C9Y3U7 E K E W I A H I W E K T R E A L A D H D L P D F A G L C R N P H V Y L K S 530 540 550 560  
UniRef90\_B8FZB3 E E D Y L R E F V G V S Q A S H P D F P S Y E E F R E K G I Y K T  
UniRef90\_UPI00035FC605 I M D E I A R L C P I F A G V N Y Q R L E G Y R S L L W P V A P D G  
UniRef90\_F4B6H4 I M D E I A R L C P I F A G V N Y Q R L E G Y R S L L W P V A P D G  
UniRef90\_A4SXX4 E D I W N E H R E S T A G R D L D I T G L S Y K L E E R G P Q Q W P M P  
UniRef90\_UPI0003A65002 E H A T L S A F E N D G G R D F D L G A Y A R I D G A A Y D G L A P F Q W P Q P  
UniRef90\_UPI0003F92519 E E L I S Q A L S G S D N P H L A G I S Y E E L R K  
UniRef90\_UPI000477B9E2 Q E A W L R H I Y G E S Q K M N P E L G D L D F D A F R E M G I V K Q K N P  
UniRef90\_D1C157 R D I W D E L R V A T R G G V S D Y Y G L T W E K I E S Q G G V F W P C P  
UniRef90\_A5V706 I F A E M A S L A P L F A Q A D Y D K L E G W N S F L W G S L D G  
UniRef90\_F7Z050 E E I F N E V A K V T P S Y A G M S Y A R L E K P E A L H W P C P  
UniRef90\_UPI00035CAE63 V Y N E M M L V M P S L N N I P W S R L I K E D A V T Y P A K  
UniRef90\_Q46C84 M N E A E I F E E I A K V T P Q Y G G M S Y E R L E K P D S L Q W P C P  
UniRef90\_K8W5J3 Q H E V A R K Y L C E K S R E R F P D M P T Y E E M K T V G I F K H K C  
UniRef90\_I4MR76 G S G S G D G A Q G I G A V Y E E M R A I S G L S W P R L W R E G A V T Y P V R  
UniRef90\_B4DAA9 E E I F D E L A A A S K G G P I D Y S G M T Y E K I E N N M G I F W P C P  
UniRef90\_UPI00036DAD38 V Y T E M A K T M P S L K N I S W E R L E R E G A V T Y P A D  
UniRef90\_Q7X2P6 A E V W R E H A R L T A Y R N G G A R L M D L Q A K A I G N Q  
UniRef90\_Q1J2V5 I M E E I A A L V P L Y S G V T Y E R L E G F K S L Q W P V L P D G  
UniRef90\_F9MUL1 I M D E I A S V T P S Y G G M S Y D R L E G E G L Q W P C L  
UniRef90\_UPI00037180DF I M D E I A R L T P T F A G V S F K L D E L G S I L Q W P C N  
UniRef90\_B4V884 E Q V F E E L K G A A N P K T G Y D L R G V S Y E R L R A T P V Q W P A A T  
UniRef90\_I4YRW6 E H A A L S G V A N G G S R D F D I A A C A E L T G S A Y D T L A P F Q W P R R  
UniRef90\_D1A3S4 V F D E L R G A S A G G P A D Y S G I T Y E R I D A E G G V F W P C P  
UniRef90\_B8G227 E D V W N E Y L K C T T G T H M E L A T Y P A L R E A H Q W P V K D H Q G N K G  
UniRef90\_UPI00030A2AE5 Q D E W I R K W L I E E S K K L D P N F P S Y E E M Q K N G V I K F K D I  
UniRef90\_UPI00040B7E24 E D M I R Q A L D H P G N H L K S I T L E G L L K N Q Y L R A G R H S F  
UniRef90\_E3G7Z4 Q S Q W L Q H L Y A K M V A K D P Q L P A Y D E L K A M G I Y K R K D P  
UniRef90\_C8WN82 I W D E V R S L C P Q F A G A T Y E K M A G T G Y A Q W P I F  
UniRef90\_A0A059DP53 E H A Q L S G F E N D G R R D F D L G G A G S L S R A D Y D A L E F Q W P L P  
UniRef90\_D1AGJ3 I M D E I A A L T P Q Y G G I T H K R I L E R G G L Q W P C P  
UniRef90\_UPI0004647760 Q S Q W L Q H L Y A K M R A R D A D L P D Y D A L K A M G I Y K R Q D  
UniRef90\_A9BF64 I M D E I A A Q V S K L Y G G I S Y E R L E K G G L Q W P C P  
UniRef90\_A4TRR7 I W D E M R G L C P P F A G V T Y E K L A G L G Y V Q W P C P  
UniRef90\_C8WL81 E E A W L Q A F C Y E E A R K E D A D L P T Y D E M K E M G V Y R R K D P  
UniRef90\_E8V3P9 D E L I A Q L D T K H P W M Q G I T R D R L R A E G V L P E  
UniRef90\_S3UPY0 E E I F L E H C R L T T G T K I D I S G L D Y R E I Q N L R V A Q W P Y P  
UniRef90\_UPI00047E1F31 A R D V A D E F R L A S K G G Y A D Y Y G A T W D K L D K Q D G V F W P C R  
UniRef90\_L0M2U9 I W D E M R E L C P L F Y G V T Y D K M G D M G H V Q W P C P  
UniRef90\_W0UJZ78 D A L A A Q A F D A G H P R A V H F D W E S L K R S G W Q K L  
UniRef90\_H0HZM8 E H A A L S G F E N G G E R D F D I G A H A G V D A S A Y E E L E P F Q W P A V  
UniRef90\_UPI0002556D6A I M D E I A R L T P T F S R V S Y A E I D R H G S L Q W P C T  
UniRef90\_I0XN62 E E I F L E H C R L T E G T K I D I L G L D Y E E I R K H R T V R W P Y P  
UniRef90\_G8ND99 I W E E V R R A I P E M M G G I S Y A R L E K E G V R W P C P  
UniRef90\_Q023D2 P R E I F E E L R R A S Q G G L A D Y Y G I T Y E K L D Q Q M G V F W P C P  
UniRef90\_C7Q4T2 E V I F E E K R A W N P K T G W D I R G V S Y Q R W P S A D A D G P D R N P I R  
UniRef90\_A7K229 I T S E I A R V T P Q Y A G L R W D A L T P N G V Q W P S N  
UniRef90\_UPI000375BFEE V F D E I R R F A N P G A S H A A L R D A P L Q W P C P P H D G R D R H P I R Y  
UniRef90\_Q2WB01 V F D E M C G L M G S L S G I T W E R L E S E G G I T T P A G  
UniRef90\_UPI00047C0F8E P Y T T P E S L F N E H R A S T R R G R D L D I T G L D Y L L E Q A P Q Q W P F P  
UniRef90\_I9BRR1 E D I A A Q A L R A D D P R C A G I D W Q S L K L A G W Q K L  
UniRef90\_D4E3Y4 E T Q W L K G M Y D D M K Q Q A R N A R V A L P P F D M F W Q S N N Y F P V I P E  
UniRef90\_UPI00037ABB99 P E A V F K M L T E L S A G A C D M T G I S S Y Q M V D E F G G I Q W P C R  
UniRef90\_M3UJP4 D T A A V F D E L K T F H N P R T G W D V R G S V H S R L R G G P V I Q W P A  
UniRef90\_UPI00046706E7 E F K E I R R F S N P A T G Y D I S G V T H E R L R E G S I Q W P A S E  
UniRef90\_UPI00035DF04C I M D E I A R T P T F A G V T Y D K L E H L G S I Q W P C N  
UniRef90\_C8WK53 V M D E I V S V T P T Y G G M S H A R L D G D E T A G R G L Q W P C P  
UniRef90\_M3EW38 E Q V F E E I R R A W N P K T G W D L R G V S Y E R L R G S V Q W P A A  
UniRef90\_A0LNF8 E D I W N F Q L Q G T G L T V E E L Q A R G F I S  
UniRef90\_M7D1T9 I M D E I A R L T P T F T G V S Y D K L D R L G S I Q W P C N  
UniRef90\_W6LV86 E H A A L S G F E N E G R R D F D I S A L A D L T D D G Y D A L P V Q W P L P  
UniRef90\_I0XU44 E E F F L E H C L T K G T N L D I G G L D Y S I L Q E R R S V Q W P F P  
UniRef90\_H8IT28 E F E I K R F S N P G I S Y E R L R S P V Q W P C A P D S E A D R N P I R Y  
UniRef90\_H6LB59 I W D E M R S L S P L F F G A T Y E K I E K M G G V L W P C K  
UniRef90\_Q087B8 I W Q E I N H V T P Q Y Q G L T W Q R L E H K V D G I Q W P C F  
UniRef90\_W1N9V0 I M D E I A Q L T P S F A G V S Y A L D E R D S L Q W P C N  
UniRef90\_I2JPF1 T S D I F D E M K Q L S K G A A R N L D I S G M S H D L I E T Q R G I Q W P M R  
UniRef90\_A9I094 I M D E I A R L T P T F S G V S Y A K L D R M G S L Q W P C N  
UniRef90\_K8GNM6 A E V F A R L V E L T R G R L C D M S G M S H D R L C Q E G L Q W P L S  
UniRef90\_R4KEZ4 D D L W H Y Q L Q G T G L T L E D F A A K G F V S L C D  
UniRef90\_G0HJD4 I T A E Y F R L F P S L E E M S V D E L K A G D G V F L P K K  
UniRef90\_UPI00047CD7BB E Q A T L S G F E N D G A R D F D I G A Y A S V D G E D Y E A L A P F Q W P A P  
UniRef90\_W0JJ08 P K D Q R D K L L K D G V I S L I G P I P E D V D L S G D I D P K V A Y Q K M L D  
UniRef90\_K9DA51 E H A R L S T W E D G Y R R A F R L D L P V G I D R A A Y D A L E P V Q W P L R  
UniRef90\_UPI0003B55465 E E I W D E Y R L L T A G T P C D Q F G M T N E R L A E T S L R W P C P  
UniRef90\_A0LP28 L W D D E I S V L S P P F A G I K Y S R I E G D G L Q W P V P  
UniRef90\_A0A031LS37 V M K E I A S L V P E F A G I T Y S R L E E G F N S L Q W P V S  
UniRef90\_I9BST8 I M D E I A R L T P T F H G V S Y A R L E E L G S I Q W P C N  
UniRef90\_Q1LDU3 E H A R L S A W R N G A P R M F D I G G L A G M D Q A A Y D A M L P V Q W P L P  
UniRef90\_Q51328 A E V Y A E F T Q L T K G R P C E Q T G I G H Q R L G A D G P L Q W P C P  
UniRef90\_A3W033 E Y A A L S G L A G Q M G R D F D I S A L S T L S D A Y N D L S P Q R W P L T  
UniRef90\_I4Z4S7 I M D E I A R L T P T F A G V S Y D K L E A L G S I Q W P C N  
UniRef90\_A0A015M5C6 I M A E A S L A V V F A G V S Y E R L D N W N S L V L W P V L  
UniRef90\_B4EZ02 Y Q E W I E Y C Y N Q V K A N N P A L P S F A E T N D M G I V D R K L P  
UniRef90\_UPI000370A4D6 E I F A E I R G F S N P R T G Y D L R G I D Y A A L R E G P M Q W P C P  
UniRef90\_UPI00040D2EAB I M E E A A S L S P I F A G V T Y E R L E G Y N S L Q W P V R A G G I D T P R L  
UniRef90\_V6MBL6 I M D E I A S L S P I F A G V S Y D R L E G W N S L V W P V K A D G T D P L L  
UniRef90\_Q1ZA48 W D E W Q Q H L Y E L S R K K H P E F P P F E V L D K A K T I R M P F D  
UniRef90\_D9TEZ9 V F A E L G R A S A G G P A D Y A G I T W D R I D A D T G V F W P C P  
UniRef90\_B4WQJ0 A A V Y D E F V S L T S D Q L C D M S G L S H E R L A S G P I Q W P A P  
UniRef90\_A7IL15 I M D E I A A L T P T F A G V N Y A K L D E L G S V Q W P C N

UniRef90\_C9Y3U7 P P Y V A F E E N I R D P D N H P F P T P S G K I E L F S K R L W E M Q H P 600  
UniRef90\_B8FZB3 K A T K V V A Y E K F I K D P E A N P L T T P S G K F E I F S K D L Y D I Q N P  
UniRef90\_UPI00035FC605 T D T P Y L Y K D R F N F P E D G K A R F Y P  
UniRef90\_F4B6H4 E D G T D T P L L Y V N A F A T E D D G K A L L Y P L S W K P P E L R  
UniRef90\_A4SXX4 V G S D S G K K R L Y E D G I F P T K D K K A H F I A A P Y K A T A E S  
UniRef90\_UPI0003A65002 A A S Q V Q T T R F F A D G G F Y H A D R K A R F V A  
UniRef90\_UPI0003F92519 S R F M R A R H T D N L V D R L K T P S G K I E L F S K K M E E D G H P  
UniRef90\_UPI000477B9E2 G E P H V E F R A F R E N P E A N P L A T P S G K I E L Y S E R L A D I A  
UniRef90\_D1C157 S E D H P G T P R L F T E R F F G H P D G R A R F H P V E Y T P P A E E  
UniRef90\_A5V706 A Y E A M E P M R W L D R P F A D G R F P T P D G R A R L V P V A Q A P L P E P  
UniRef90\_F7Z050 A N T P L L Y K D G F P F P D G K A R F A L T D W V K P A E F  
UniRef90\_D1YYX0 T P E H P G T P V L H T Q K F S H P D G L G V E T P L E F K P P A E V  
UniRef90\_UPI00035CAE63 S E N E P G S A V I F E D G F P T A D G S G K L V P A D L R A P D E V  
UniRef90\_Q46C84 D K T H L G T P I L L H T E K F S T S D G L A E F S G I E W K P P A E V  
UniRef90\_K8W5J3 P D E H V I G F K A F R D N P Q A N P L K T P S G K I E L V Y S E S L A E I A I D  
UniRef90\_I4MR76 D E Q D P G Q P V V F T D G F P M P S G R A R L V P A A L V P P A E E  
UniRef90\_B4DAA9 A P E H P G T P R L F E G G K F H H P D G K A K F H A Y E Y R P P A E D  
UniRef90\_UPI00036DAD38 A T D K P G N E I I F T T G F P T E S G R G K I V P A N V L P P A E V  
UniRef90\_Q7X2P6 A Y D E M A P F S W H P Q P F A D G R Y P T P S G R A R L V P V A Q R P L D A  
UniRef90\_Q1J2V5 S D T P L L F T E G F P F D R K A R L Y P A R F I A P Q E T  
UniRef90\_F9MUL1 N K D H P G T K Y L H K E V M A R G K G L F M P I D Y Q E S K E L  
UniRef90\_UPI00037180DF E E A P L G T P T M H V H E F V R G K G R F M L T E Y V P T A E K  
UniRef90\_B4V884 G D G P D R N P I R Y V D D E A A G P F P T A S G R A V F F A R P H I P P A E M  
UniRef90\_I4YRW6 Q G A P L D N T T T R F F A E G G F Y T P D Q R G R F V P T P V T E Q A V S  
UniRef90\_D1A3S4 S P D H P G T P R F L E R F H T P D G R A R F V P V D Y G G V A E R  
UniRef90\_B8G227 A V R R Y V A P E D P Y V K E G I D F Y S A K D H K A V I F A R P Y L G P A E V  
UniRef90\_UPI00030A2AE5 T M V R F A D Q I K D L K N P F E T P S G K I E L F S K D L F D M N N P  
UniRef90\_UPI00040B7E24 L N P E K L P T P S G K I E L Y S K R M E K D G H P  
UniRef90\_E3G7Z4 N G H F V A Y K A F R D D P V A S P L K T P S G K I E I Y S A R L A Q I A I S  
UniRef90\_C8VN82 A E A A D D P D N H G T A E L F A G G F T T P D G K G R L E A A W R P P T E Q  
UniRef90\_A0A059DP53 K D A P A R P A H H R F F A D G R F Y T P D H K A R F L P V T Y R P P A S A  
UniRef90\_D1AGJ3 E K N H E G T P Y L H K N T F S R G K G K F I P A A H R F P A E V  
UniRef90\_UPI0004647760 P D G H Y V A Y K A F R E D P L A N P L A T P S S G K I E I Y S A R L A T I A I S  
UniRef90\_A9BF64 D V I N H P G T K Y L H K E D G F S R G K G K F F P V E F A P P E K S  
UniRef90\_A4TRR7 T E D H P G T P Y L Y T D N Q F A T A D G K G L L S A P W Q P P H E Q  
UniRef90\_C8WL81 D G H Q V A L K D F R D P V A N P L K T P S G K I E I Y S E Q L A E I A E D  
UniRef90\_E8V3P9 L I F P R N A N G E Y L P F S D A S W F R T P S G R G E F Y S E T L A Q R G M D  
UniRef90\_S3UPY0 T K G Y S G S P R L F E D K I F Y R P G G K A R L H A V I S F E D D S E K  
UniRef90\_UPI00047E1F31 D E N D P G T P H M F L D K K F Y H P D G K A K I C A L P Y R P P A E R  
UniRef90\_L0M2U9 T L D H P G T P Y L Y A G N Q F D T P D G K G H L F A P W R A P A E R  
UniRef90\_W0UJZ78 A L P P S P R E R S N H I E F F A N G G F Y T P D R K A R F V A V R P A G  
UniRef90\_H0HZM8 D E A P A G T P T M V I E Q F V R G K  
UniRef90\_UPI0002556D6A R K G H S D N I R L F V D G K F Y R K N E R A M I H S V R S E D D S E K  
UniRef90\_G8ND99 L E D H P G E A V L F R E R F N T P S G R A R F F P V H P T P V G E P  
UniRef90\_Q023D2 T L D H P G T P R L F E D G R F F H P D G K A R F M S L V W R D S G D P  
UniRef90\_C7Q4T2 Y L N D G V S Q T E L I H P D G T K P F P T A S G R A V F F A R P H L P A A E L  
UniRef90\_A7K229 K N N P N G T R I M H Q T Q F T R G K G Q M V G V P F R Y A A E L  
UniRef90\_UPI000375BFEE L N D G V S Q A R A T L A D G R V P P F P T P T G K A R F A R P H V A P A E M  
UniRef90\_Q2WB01 K A I L F G D V F P T G D G K A R L V P A S G L A P A E N  
UniRef90\_UPI00047C0F8E A G A T Q G R V R L Y E D G T F T P D D G R A R F A D V K Y R P V A E N  
UniRef90\_I9BRR1 K L A R A P F A N G G F A T P S G K C E F Y S H Q L A E R G H D  
UniRef90\_D4E3Y4 A N Q Q W V R F A D Y R E N P L L N P L G T P S G K I E I Y S D A I A K M D Y Q  
UniRef90\_UPI00037ABB99 A E D V P A L S R D N Q R F E D G K F Y H P D G K A K F V F G D A T P V L E D  
UniRef90\_M3UJP4 A P G P D R N P I R Y I D G D G L R F A T A N G R A Q F L A R P Y L P P A E L  
UniRef90\_UPI00046706E7 A G Q A T T R N P I R Y R A P D G G K F A T E S G R A K F W P R P H A G P R E M  
UniRef90\_UPI00035DF04C E A H P E S T P T M H V D T F V R G L G Q S M L T  
UniRef90\_C8WK53 S A E H P G T P I L L H M G E F G L G A F S T P D Y Q P S A E L  
UniRef90\_M3EW38 T E D G P A R N P I R Y A G A G A D G F P T P S G R A V F H A R P H L P A A E M  
UniRef90\_A0LNF8 L T E K P I F W D R A N G L P L K T P S G K I E F V I S S L L E N A G F P  
UniRef90\_M7D1T9 E E H P D G T P T M H V L D F P I G R G K F A V T E Y V A S E E K  
UniRef90\_W6LV86 R G A T T G A T R L F G E G G F F T A D G K A R C I A V I G E R S P A Y A  
UniRef90\_I0XU44 S R D H V G S P R L F S D G K F Y R P G G K A K I H A V I E P E D N S E R  
UniRef90\_H8IT28 L N D G V S Q S Q L V R D D G T V P R F P T P S G R A A F F A R P H L L P P E E M  
UniRef90\_H6LB59 D E S M A D K G T M Y L H K D G V F A H L D G K G K F F A T E W R A P G E I  
UniRef90\_Q087B8 D E N H P G T P I L L H T E T F L R G K G R M M P V S Y R L P A E M  
UniRef90\_W1N9V0 A E H P L G T P T M H E I D  
UniRef90\_I2JPF1 E G D D T G N P R L Y S D G V F P T P N G K A N L L A M D Y I E D N E V  
UniRef90\_A9I094 D A A P D G T P I M H I D E F V R G K  
UniRef90\_K8GNM6 A D S N Q A S S G F T S A K R L Y W H F P T L D G R A R F G A Y H S Y G L A E P  
UniRef90\_R4KEZ4 E P I Y W N R E D G L K F K T P S G K I E F V I S S L L E E N G Y P  
UniRef90\_G0HJD4 R L H T W E F A T P D G K A R F I A V E Q V Q P W E R  
UniRef90\_UPI00047CD7BB S P A T P L W P A G H L P R K G G D R M P W S  
UniRef90\_W0JJ08 A Y K K A P F N P Y P I A L G E D V S F N T G S G K I D I Y C E S L K E G G F D  
UniRef90\_K9DA51 A P T D G A A R L F G D G R F S H P D G K A R F V A T A P R L P V H A  
UniRef90\_UPI0003B55465 H P R H P G T A R R Y V R T K F F T D S G K A Q F K T P Y Q P P D E D  
UniRef90\_A0LP28 T E T H P G T P V M H K D G K F T G G R G Q F V A V D W T P P K E V  
UniRef90\_A0A031LS37 S D G K G T E T L Y L E K F N K P D G K A H F W P T Y Y I E P  
UniRef90\_I9BST8 E A A P Q G T P I M H I D A F V R G K G R F M P T Q Y V P T E E R  
UniRef90\_Q1LDU3 V M A S S G K Q R L F E N A R F A F A D G R A R F V A T A R A P V H A  
UniRef90\_Q51328 E E A G E N N A A R L Y T D L R F H T P D G R A K F A A Y H S R G L A E P  
UniRef90\_A3W033 R A R S G G R F F A D G Q F F T P D G K A R L L P V S C K P P A A R  
UniRef90\_I4Z4S7 E T A P A G T P M M H V D R F V R G K G K F M I T D F V P T E E R  
UniRef90\_A0A015M5C6 E N G Q D T P L L F T E K F G F P D G K A K L T P V D W T P P F E  
UniRef90\_B4EZ02 P R S A Y V A L E A F R Q D P I A N P L K T A S G K I E I Y S E K L M Q D T E D  
UniRef90\_UPI000370A4D6 D P A Q R R N P I R Y L N D G R S R V P P T S G R A Q F H P R P H L P A D E L  
UniRef90\_UPI00040D2EAB Y E D G F P F E D G K A K F Y A V S Y R  
UniRef90\_V6MBL6 Y T E R F T F P D G R A R L  
UniRef90\_Q1ZA48 P N A D R Y V F K D F R K A P E K H P L P T S T G K I E I Y S H I L L E K Y A  
UniRef90\_D9TEZ9 D R D G P D T P R L F A D R F P T P D G R A R F H P V T H R P A A E P  
UniRef90\_B4WQJ0 I S E T D E T A A D K F D K R L Y T R F L T E N S R A K F A A F H A K G L A E P  
UniRef90\_A7IL15 D S A P E G T P I M H I G G F V R G K G K F V L T E Y V P T D E K

UniRef90\_C9Y3U7 E I P A L S H Y V P  
 UniRef90\_B8FZB3 Q L P A L P K Y M P  
 UniRef90\_UPI00035FC605 P K Y L E P  
 UniRef90\_F4B6H4 D  
 UniRef90\_A4SXX4 V D A R Y P F  
 UniRef90\_UPI0003A65002  
 UniRef90\_UPI0003F92519 P L P D Y P F L F V P A  
 UniRef90\_UPI000477B9E2  
 UniRef90\_D1CI57 P G G A Y P  
 UniRef90\_A5V706  
 UniRef90\_F7Z050 P  
 UniRef90\_D1YYX0 P D A E Y P F  
 UniRef90\_UPI00035CAE63 P D E E F P M  
 UniRef90\_Q46C84 P D V E Y P F  
 UniRef90\_K8W5J3 P L P L Y T E G F E  
 UniRef90\_I4MR76 P D A Q Y P  
 UniRef90\_B4DAA9 V D V E Y P L F F  
 UniRef90\_UPI00036DAD38 P D E N Y P M  
 UniRef90\_Q7X2P6 P L R D W P M  
 UniRef90\_Q1J2V5 P D A D Y  
 UniRef90\_F9MUL1 P D E D Y P  
 UniRef90\_UPI00037180DF V N A K Y P  
 UniRef90\_B4V884 P D D E F P  
 UniRef90\_I4YRW6 P D  
 UniRef90\_D1A3S4 I D A D Y P V Y L  
 UniRef90\_B8G227 V D E E Y P Y Y L  
 UniRef90\_UPI00030A2AE5 E I P A V P K H V  
 UniRef90\_UPI00040B7E24 P L P T Y  
 UniRef90\_E3G7Z4 P L P V Y A S T F E  
 UniRef90\_C8WV82 P D E R Y P  
 UniRef90\_A0A059DP53 C S A E F P  
 UniRef90\_D1AGJ3 P D N E Y P V  
 UniRef90\_UPI0004647760 P L P V Y A S T F E  
 UniRef90\_A9BF64 A D E K Y  
 UniRef90\_A4TRR7 T D S D Y P  
 UniRef90\_C8WL81 P L P V Y A P G V E  
 UniRef90\_E8V3P9 P L P G W L P  
 UniRef90\_S3UPY0 T N V E Y P  
 UniRef90\_UPI00047E1F31 P D E K Y P  
 UniRef90\_L0M2U9 P D D K Y P  
 UniRef90\_W0UJZ78 P L P A Y L P P Y E S S  
 UniRef90\_H0HZM8  
 UniRef90\_UPI0002556D6A  
 UniRef90\_I0XN62 P D E D F P  
 UniRef90\_G8ND99 P S P D Y P  
 UniRef90\_Q023D2 V D A E F S L Y L  
 UniRef90\_C7Q4T2 P D D D Y P F  
 UniRef90\_A7K229 P D E E Y P  
 UniRef90\_UPI000375BFEE P T P E F P  
 UniRef90\_Q2WB01 P D A D Y P F  
 UniRef90\_UPI00047C0F8E R D A R Y P F  
 UniRef90\_I9BRR1 P L P T F P P Y E S P  
 UniRef90\_D4E3Y4 D C K G L P T W M P P  
 UniRef90\_UPI00037ABB99 T D E E F P  
 UniRef90\_M3UJP4 P D D D F P  
 UniRef90\_UPI00046706E7 P D G D Y P F  
 UniRef90\_UPI00035DF04C P Y  
 UniRef90\_C8WVK53 P D A E Y P  
 UniRef90\_M3EW38 P D D D Y P F  
 UniRef90\_A0LNF8 S F P A Y A R V E P  
 UniRef90\_M7D1T9 T N R K F P  
 UniRef90\_W6LV86 V D K S F P  
 UniRef90\_I0XU44 T N K N F P  
 UniRef90\_H8IT28 P D D D Y P F  
 UniRef90\_H6LB59 E S K E Y P F  
 UniRef90\_Q087B8 P D S E Y P  
 UniRef90\_W1N9V0  
 UniRef90\_I2JPF1 P D D S Y P F W L  
 UniRef90\_A9I094  
 UniRef90\_K8GNM6 P D P A Y P F  
 UniRef90\_R4KEZ4 S F P E Y E S V Q P P A  
 UniRef90\_G0HJD4 P D Y E Y P F  
 UniRef90\_UPI00047CD7BB  
 UniRef90\_W0JJ08 P L P T Y T P P  
 UniRef90\_K9DA51 T G G E Y P  
 UniRef90\_UPI0003B55465 V N V E F P  
 UniRef90\_A0LP28 P D A E Y P F  
 UniRef90\_A0A031LS37  
 UniRef90\_I9BST8 V N A R Y P  
 UniRef90\_Q1LDU3 T D D E F P  
 UniRef90\_Q51328 P D P D F P F  
 UniRef90\_A3W033 T E P R Y P F  
 UniRef90\_I4Z4S7 T G P R F P  
 UniRef90\_A0A015M5C6 P G P E Y  
 UniRef90\_B4EZ02 R L P A L P E Y  
 UniRef90\_UPI000370A4D6 P D D D Y P F  
 UniRef90\_UPI00040D2EAB  
 UniRef90\_V6MBL6  
 UniRef90\_Q1ZA48  
 UniRef90\_D9TEZ9 V C A D Y P L H F  
 UniRef90\_B4WQJ0 P D D Q F P M  
 UniRef90\_A7IL15 T G P R F P



UniRef90\_H5TY13  
UniRef90\_A6QAE2  
UniRef90\_F4C4C8  
UniRef90\_B7KFD9  
UniRef90\_UPI000367F899  
UniRef90\_Q28P87  
UniRef90\_A0L7Z7  
UniRef90\_UPI0003A238A9  
UniRef90\_H0Q599  
UniRef90\_Q1H4J9  
UniRef90\_Q5E0S7  
UniRef90\_UPI00035DA91C  
UniRef90\_UPI000364F353  
UniRef90\_N8VGH7  
UniRef90\_G4I4N0  
UniRef90\_T0CYU9  
UniRef90\_V5XB16  
UniRef90\_C0D9I5  
UniRef90\_S6HY14  
UniRef90\_E1IBP3  
UniRef90\_A3X6S4  
UniRef90\_D3CV15  
UniRef90\_A5L6B2  
UniRef90\_M9RC01  
UniRef90\_M2WS27  
UniRef90\_UPI0003B58D8A  
UniRef90\_A6VQ09  
UniRef90\_F5Z4X7  
UniRef90\_J7QGF2  
UniRef90\_A1UI27  
UniRef90\_J3DA01  
UniRef90\_R1IN79  
UniRef90\_F2NH78  
UniRef90\_UPI00046877AE  
UniRef90\_F6DCH0  
UniRef90\_B8EJ49  
UniRef90\_G0A8X3  
UniRef90\_E1YDM7  
UniRef90\_UPI000478AC1B  
UniRef90\_W1N7Q6  
UniRef90\_Q05V08  
UniRef90\_R7G3H8  
UniRef90\_E1R268  
UniRef90\_N9QLX1  
UniRef90\_I3ZTG5  
UniRef90\_F7UWG8  
UniRef90\_E2EA43  
UniRef90\_F4GQD1  
UniRef90\_V4HLH3  
UniRef90\_U4WKQ1  
UniRef90\_Q1PVH1  
UniRef90\_S3XCY1  
UniRef90\_J1F997  
UniRef90\_J7GFLO  
UniRef90\_UPI0004637B2F  
UniRef90\_K1JLM1  
UniRef90\_W2EVJ1  
UniRef90\_D3P985  
UniRef90\_I5CB57  
UniRef90\_H2ILU8  
UniRef90\_G8MBD1  
UniRef90\_UPI0003638AF0  
UniRef90\_Q1H3E9  
UniRef90\_B1VG96  
UniRef90\_UPI000464E7E5  
UniRef90\_B4UF83  
UniRef90\_J3HR96  
UniRef90\_V9GRT5  
UniRef90\_A3Y7M7  
UniRef90\_E2DDK5  
UniRef90\_D8NXH5  
UniRef90\_UPI0003B7638D  
UniRef90\_H2IKR0  
UniRef90\_UPI000377F981  
UniRef90\_H3MSD4  
UniRef90\_A0NWM4  
UniRef90\_C9ZEF5  
UniRef90\_UPI00036B3676  
UniRef90\_W6K756  
UniRef90\_U5WKD8  
UniRef90\_E2DDD9  
UniRef90\_G7GKB6  
UniRef90\_H5EIS3  
UniRef90\_V2TGN5  
UniRef90\_UPI0003B6EEF3  
UniRef90\_A9BV39  
UniRef90\_W0EAR7  
UniRef90\_UPI00047847A5  
UniRef90\_B8FMR6  
UniRef90\_S0G6R9  
UniRef90\_A6C7E0  
UniRef90\_B8FN53

UniRef90\_H5TY13 T K G S T T S D M L A A P 60 G R M E K A S I R T S R D T D R E S 80  
UniRef90\_A6QAE2 P K H K M V R A D N R I A T P L I R K E G Q L I Q S  
UniRef90\_F4C4C8 S K G M N L H H S D R L L F P Q M R Y H K D M P L L Q R  
UniRef90\_B7KFD9 V K G A T I M D K D R L L Y P M M R E S L S D S F R R  
UniRef90\_UPI000367F899 V K G A T L A D K N R L H Y P M V R E S L D R E F R R  
UniRef90\_Q28P87 V K G R F A Y H S D R I L N P M I R D S I D Q F W K E  
UniRef90\_A0L7Z7 K S P N L V Y D P Q R L Q T P L K R V G P K G S Y A F E P  
UniRef90\_UPI0003A238A9 A L G E T V S L D G R L L Y P Q V R E A D G L R R R  
UniRef90\_HOQ599 F A W G Y A T H P D R I E T T P M I R A S I D E E P W R K  
UniRef90\_Q1H4J9 Y C A Q A V T A S G R L E H A Y L R T E R N A E P A R  
UniRef90\_Q5E0S7 G I K G I I Y S P S R V R Y P M V R L D W L K K H K Y S A E T R G N N R F I R  
UniRef90\_UPI00035DA91C T K G A T M A A P G R L L D R A L V R A E R G A Q P T P A D V A E A V A T V A A R  
UniRef90\_UPI000364F353 S K G T A L A D E N R L L H P L V D G Q E  
UniRef90\_N8VGH7 N L A D T L G L E T R L L Q P M L G A R K D Q R E D  
UniRef90\_G4I4N0 T K G A T H T E L M G S S E G R A I E A L I R P A R R G E E F V S  
UniRef90\_T0CYU9 F G W D F V N S N E R I V E P L I R R G D A F Y P  
UniRef90\_V5XB16 T K G A T H A E L M A A T E G R M T A A L V R P E R G A Q L V E  
UniRef90\_C0D9I5 T K G N Y L Y R E D R I K T P L R R V G E R G E G K F E P  
UniRef90\_S6HY14 F A F G Y A T H G D R I K E P M V R D S I D Q P W R V  
UniRef90\_E1IBP3 A Y L E R V Y S T E R V L H P L R R V G P K G G D Q W E R  
UniRef90\_A3X6S4 S K G Q T I D L E G R L L S P Q I M G R E  
UniRef90\_D3CV15 T K G A T S A D M L A A P G R L G T A R I R P R R G G E P V D  
UniRef90\_A5L6B2 T K G A A L G D T G R L T Q P M Q R V A S G Q Q L  
UniRef90\_M9RC01 F A W G Y A N H S D R I L N P M I R D K L T D P W R E  
UniRef90\_M2WS27 T K G N T A D M L A A G P G R M D A A H L R S E R G G P I A E  
UniRef90\_UPI0003B58D8A F G W D F V N S E E R L Q N P L V R E N G Q F V E  
UniRef90\_A6VQ09 G S Y K F V M S G D R L T D P L I K D R A T G K F R K  
UniRef90\_F5Z4X7 V K G T N L D L S G R L L H P T M A G A K  
UniRef90\_J7QGf2 F A Y G Y A H H G D R L L N P M I R E S I D Q P W R V  
UniRef90\_A1UI27 T K G A T H A E M N A T D G R L T S A L L R P T R H E E P V P  
UniRef90\_J3DA01 T K G T T C G Q A I A E S G R M E H A Y L R H E R R R D P V R  
UniRef90\_R1IN79 F A F G Y A T H K D R V I T D P M I R D S I D E P W R K  
UniRef90\_F2NH78 V K Y D F I Y S P E R L L T T A P L I R D K K E G E L R E  
UniRef90\_UPI00046877AE S K G E T V D L E G R L L A P Q I R D G V T  
UniRef90\_F6DCH0 A L A E T L D S R G R L L E P Q I N G V A  
UniRef90\_B8EJ49 V K G R F A Y H R D R I T K P M I R A S I E D P W R E  
UniRef90\_G0A8X3 F A W G Y A T H K D R I T K P M I R S K I T D P W R E  
UniRef90\_E1YDM7 S A R Q I I Y S E K R L K H P L K R I G A K G T Y E F E K  
UniRef90\_UPI000478AC1B N K V R H L Y D K N R L Q Y P M K R I G K K G S G E F T K  
UniRef90\_W1N7Q6 A L A E T L G D R G R L L Q P L V D G R A  
UniRef90\_Q05V08 I K G A T V G A R G R L H Q P L Y R A S L D Q D F E P  
UniRef90\_R7G3H8 S K G Q Y V Y N K D R I L Y P M K R I G K K G S G E F E R  
UniRef90\_E1R268 G Y R M A L Y H P D R I L H P L V R C G K R G S A S F R K  
UniRef90\_N9QLX1 I K G S H L A D K T R L L H P M T G R K E Q R Q I  
UniRef90\_I3ZTG5 P K G L Y V F S K D R L K R P L K R V G S A M V P  
UniRef90\_F7UWG8 A C L R W I N H A E R L T Y P L R R V G K R G E G H F E R  
UniRef90\_E2EA43 F A W G Y A T H E D R M L K P M I R G S I A R Q R G G E L E A  
UniRef90\_F4GQD1 F S Y G F V N S D D R L T S P L V R D D D P W R E  
UniRef90\_V4HLH3 F G W D F V N S N E R L S T P L I D G E F R T  
UniRef90\_U4WKQ1 T L P P V F C A E D R L T K P M I R R R G E E F V P  
UniRef90\_Q1PVH1 T L P P V F C A E D R L T K P M I R R R D G K L S P  
UniRef90\_S3XCY1  
UniRef90\_J1F997 T G P D Q V Y T Q A R V K Y P M V R K G F L A N P A A P K G V R G S D E F V R  
UniRef90\_J7GFLO T Y P R R V Y S P D R I K Y P M I Q D G R G S G K W R R  
UniRef90\_UPI0004637B2F A S K Q Y L Y N E E R I L F P M K R V G E K G S G Q F E R  
UniRef90\_K1JLM1 S M R Q R I Y A P E R L K F P M K R V G R R G E G R F E R  
UniRef90\_W2EVJ1 V K V N H T R A A D R L L Y P L R T G P K G S G R F E R  
UniRef90\_D3P985 I K G F L M Y H P D R L K Y P M I R Q K N G R F K K  
UniRef90\_I5CB57 F A W G Y A T H K D R I T K P M I R K A I T D P W R E  
UniRef90\_H2ILU8 E K G W A L S P E N R L T Q P L K R L K D K F T P  
UniRef90\_G8MBD1 V K G S A L G D T V G L E G R L L N P K R R D K T T G A L A D  
UniRef90\_UPI0003638AF0 V K G S A L H A Q G R L T R P R V D G V E  
UniRef90\_Q1H3E9 F A W G Y A T H R D R I T T P M I R K S I H D P W Q E  
UniRef90\_B1VG96 S I R H R I Y N P D R L K T P L K R K P D T K R G D G W I E  
UniRef90\_UPI000464E7E5 T K G Q T A H M V M G D G G R L A H A Y V R H E R S A D P T P  
UniRef90\_B4UF83 L K P Q I M S A P D R C L H P L V R K G G K L V R  
UniRef90\_J3HR96 V K G R F A Y H K D R I L N P M V R E K I T D P W R E  
UniRef90\_V9GRT5  
UniRef90\_A3Y7M7 N L S Q T L V P D G R L L T P Y V D G K E  
UniRef90\_E2DDK5 L T P R L K S P M I R R Q K G G K L E N  
UniRef90\_D8NXH5 N Y Q D R V Y S D Q R V L Y P M R R T G P K G S G Q F E R  
UniRef90\_UPI0003B7638D A K V F Q L Y D K D R L K T P L I R T G E R G S G E F R K  
UniRef90\_H2IKR0 T K G I A L G H D G R L L A P K L K T E A G D W C D  
UniRef90\_UPI000377F981 L K G I F E Y A P G R G E K P M M R N G I H E P Y R S  
UniRef90\_H3MSD4 T Y P R R V Y S P D R I K Y P M I Q D G R G S G N W R R  
UniRef90\_A0NWM4 S K G E T L S L D D R L P Y P E I A G E R  
UniRef90\_C9ZEF5 G K G Q H L D P A G R L G T P L V R D G R G T P L R P  
UniRef90\_UPI00036B3676 V K G H T L G L Q G R L L H P E I N H Q  
UniRef90\_W6K756 F A W S Y A T H E D R I T R P M I R E K A A D S W R E  
UniRef90\_U5WKD8 T K G A T L A A P G R L R L T K P L I R K G G K G S P L E S A Y L R N D R G E P L E P  
UniRef90\_E2DDD9 T K G T T L N V G G R L T T A L V R P A R G A A P Q P E E  
UniRef90\_G7GKB6 S I R R R I N H P D R L N Y P M K R V G T R G E G K F E R  
UniRef90\_H5EIS3 N L A D T I G L S S R L L Q P R V G R H L Q R V E  
UniRef90\_UPI0003B6EEF3 S V R Q R I Y H P D R L K Y P M K R V A G S I R G E G K Y E R  
UniRef90\_A9BV39 F A W G Y A T H K D R I T R P M V R A K I T D P W R E  
UniRef90\_W0EAR7 A R G N A L Y D P Q R I K K P M I R T G E R G S G K F E K  
UniRef90\_UPI00047847A5 F G W D F V N S E E R L T K P L I R E G D A F R E  
UniRef90\_B8FMR6 S A R D I V Y S D K R L S T P L R R T G P K G T Y E F E P  
UniRef90\_S0G6R9 P R G S A G K S M L M D D Q R P Q T P L I R V G D R G S G N W R K  
UniRef90\_A6C7E0 P K G W V L E S P N R A I S P L V K K S P D R G S N H W E P  
UniRef90\_B8FN53 V K Y D F I Y S D E R L T N P L I R N N D G T F R D

UniRef90\_H5TY13 V G I D E A L S F A A R R M R A I I A D E H H P D S V A V V Y V S G Q M S T E A Q Y  
UniRef90\_A6QAE2 V S W K E A F S K T S A E T F K T R I I Q S E H H R K G S A V A V I S T G Q Q L L T E E F Y  
UniRef90\_F4C4C8 V D W D I A F E R T A A V F K T F I K Q T Q Y G P G N S G I A F Y A S G Q Q F L L T E E Y Y  
UniRef90\_B7KFD9 V S W D E A F D R I V A Q I I K T V I Q K T Q Y G A D N G I I C M Y G S G Q Q F Q T E D E Y Y  
UniRef90\_UPI000367F899 I S W D Q A F D I I K T Q I I Q T V I R F T Q G P E A I C M Y G S G Q Q F Q T E D E Y Y  
UniRef90\_Q28P87 I S W E E A I G F A A D R R M R Q Q T Q K E K H G R E A T A I V I T G R S G S C F T N E M A M Y  
UniRef90\_A0L7Z7 I S W D E A M A T I A S A R R L Q Q T Q K A H H G A E A T A I Y I T G R S G S F L D M A M C  
UniRef90\_UPI0003A238A9 I S W D V A L D Q M A A K W R A V I D E H H G P D A V A L Y V S G Q Q L L T E D E Y Y  
UniRef90\_H0Q599 I S W E E A I A Y A A S E F R R A I Q A K H G R S S V G A I I T S S R Q C T N E E S Q Y  
UniRef90\_Q1H4J9 I V G M D K A I K E S A R R E L E R V I Q K D Y G P W A L H A G Q T G W N Q T G S F H  
UniRef90\_Q5E0S7 V T W D E A L D L F Y R E L E R V I Q K D Y G P W A L H A G Q T G W N Q T G S F H  
UniRef90\_UPI00035DA91C L S W N S A L D Q V S S R L A K V I D Q H H G P D A I A F Y V S G Q Q M S L L E A Q Y  
UniRef90\_UPI000364F353 T S W N S A L D Q V S S R L A K V I D Q H H G P D A I A F Y V S G Q Q M S L L E A Q Y  
UniRef90\_N8VGH7 T S W D T A V S S I A N K F Q Q Q C I D Q Y G R D S I A F Y V S G Q Q L L T E D E Y Y  
UniRef90\_G4I4N0 A P V D E A L T T V G T R E M L D R N H G P D S I A L Y V S G Q Q M S M E A Q Y  
UniRef90\_T0CYU9 A T W D E A L D Y I A E N L K R A I L D E N G P D A I A Y I S S G K T T N E E A N Y  
UniRef90\_V5XB16 T P V E E A V A Q A G N R L R A I V D E H H G P D A V A L Y V S G Q M S L E A Q Y  
UniRef90\_C0D9I5 I S W E E A Y E I A R R L K I V K E T Y S H S V A F Y S S R C T N E Y S G E S K  
UniRef90\_S6HY14 I S W D E A F S F A A R K L H K I Q D Q Y G R E S V G G I T S S R C T N E Y T F  
UniRef90\_E1IBP3 I S W E A A L A E I A E R W Q T I T A T Q H H G A A A I L P Y S Y S G T L G L V  
UniRef90\_A3X6S4 A G W D E A L D L M A K K F T A I R D H H G P D S V A F Y V S G Q Q L L T E D Y Y  
UniRef90\_D3CV15 V G L D E A V G L V A H R L R S I L D E H H G P D S V A L Y V S G Q Q L L T E A Q Y  
UniRef90\_A5L6B2 L P W S S A S Q L V A D K F K Q A I E E Y G P D S V A F Y V S G Q Q L L T E D Y Y  
UniRef90\_M9RC01 I S W D E A I G F S A T K L R D L Q A K H H G V K S G G I T S S R Q C T N E E T Y  
UniRef90\_M2WS27 T T M S A A I R E T A T R L R S I V D E H H G P D A F A L Y V S G Q M S L E A Q Y  
UniRef90\_UPI0003B58D8A T T W E H A L D V I Q N N F T S I K E E S G N D A L A F I S S S K T T N E E S Y  
UniRef90\_A6VQ09 A S W D E A L D L V A S K F M A L K R Q Y G P D S L A G F A C G S P N E D I Y  
UniRef90\_F5Z4X7 V D W D T A T R A V A D K I T Q T I A E H H G P D A V A F Y V S G Q Q L L T E D Y Y  
UniRef90\_J7QGf2 V S W D E A V G F A A D R L R A A Q E K Y G K N S V G V I T S S R C T N E E S Y  
UniRef90\_A1UI27 A P V D D A I V A E A G R R L R A I V D E H H G A D A V A L Y V S G Q M S L E A Q Y  
UniRef90\_J3DA01 I A M D K A I S E T A S R R L R D T L E R H H G P D A L S F Y V S G Q M S L E A Q Y  
UniRef90\_R1IN79 I S W E E A I G F A A D K I K A I R D K H H G A N A L G G I T S S R C T N E E T Y  
UniRef90\_F2NH78 A S W D E A L D L V A G R L K D T A I K H H G P D A I A G V S C A R S I N E D S Y  
UniRef90\_UPI00046877AE A D W D S A L G R V A G A F D A I R D H H G P D S V A F Y V S G Q Q L L T E D Y Y  
UniRef90\_F6DCH0 V S I D Q A C T R I A D E F K Q V I A E H H G P D A V A F Y V S G Q Q L L T E D Y Y  
UniRef90\_B8EJ49 I S W D E A L T G Y A A S F F R R I Q A K H H G K D S I G G I T S S R C T N E E T Y  
UniRef90\_G0A8X3 I S W D E A L T Y A A S E F R R I Q A K H H G K D S I G G I T S S R C T N E E T Y  
UniRef90\_E1YDM7 I S W D D A F D I I V N K L N E L K E N Y G P E T V G F Y A G T G S Y E G S F K  
UniRef90\_UPI000478AC1B I T W D E A L E I L H E K W S K L M D E D G P E S I A L P Y S F Y G N M G N Y  
UniRef90\_W1N7Q6 V D W Q V A L S E T A S R I Q A L R D E K G N A A I A G Y L S G Q Q L L T E D Y Y  
UniRef90\_Q05V08 V S W E Q A L Q T I T D Q I Q T T L A N K G A D A L A M Y G S G Q Q F H T E D Y Y  
UniRef90\_R7G3H8 I S W D E A Y R M I A E N L L R I K K E Y G P Q A A A F Y A G Y P K  
UniRef90\_E1R268 A S W S E A L D L I A E K L T E V K A K K G V H S I I R L G G S G S C R G A L H  
UniRef90\_N9QLX1 S T W D H A I S S I A N K F Q Q Y I D Q Y G R D S I A F Y V S G Q Q L L T E D Y Y  
UniRef90\_I3ZT75 I S W G V A L E E I A N R L L E I R E L E Y G N E A V I N F A S S K I S N E A N Y  
UniRef90\_F7UWG8 I S W D D A L D E I A R N L S R V V E Y G N E A V Y I N F A S S G V M S A N G I  
UniRef90\_E2EA43 V S W D E A I E F A S S R M K K I I E E H H G P D A V M T S G S S R G P N E V N Y  
UniRef90\_F4GQD1 V S W E E A L T Y A A S E K R I Q A K H H G G T N S V G G I T S S R C T N E E T Y  
UniRef90\_V4HLR3 A T W D E A L S R V A A G L G L K E E H H G G E A L S V I A S S K A T N E E N Y  
UniRef90\_U4WKQ1 A T W E E A L T L I A S K W K E M K Q K Y G G D A F G F V S S S K T T N E E A Y  
UniRef90\_Q1PVH1 V S W E E A I T H V A S R F Q E I I E T H H G P G A I A I H S G A T C T T E E Y Y  
UniRef90\_S3XCY1 V S W D D A Y R L I H E Q H M R I R K T Y G P A S V F A G S Y G W R S S G V L H  
UniRef90\_J1F997 I S W D E A M Q R I A S K M L E I K K K D G S L L G L A L T K Y  
UniRef90\_U7GFLO I S W E E A Y G L I A K K L S G L R K E Y G A K S V V F Y A G Y P K  
UniRef90\_UPI0004637B2F I S W E Q A L D E I A A R L K S D T I D R H T N E S V M I M H G S G N Q A L V N S  
UniRef90\_K1JLM1 I T W D E A L S E I A G R L T A I V A E Y H G G E A I W P Y Q G T G T L G Y V Q G  
UniRef90\_W2EVJ1 V S W D E A L D Y V A G R L K Y Y H K Y G K D S V A Y Y G S G T G C T E E S Y  
UniRef90\_D3P985 V S W D E A I A Y A A G E F K R I Q A K Y G R A S V G G I T S S R C T N E E T Y  
UniRef90\_I5CB57 I S W D E A L E E T S S L L S I L D E E H G P D A T G V I S S A R A T N E D N Y  
UniRef90\_H2ILU8 V S W D D A I G E T V A D G F A R S I V D E H H G P D G V A L Y V S G Q L L T E D Y Y  
UniRef90\_G8MBD1 V D W E T A I S S V A E R L A A T Q R D Y G R Q S V A A Y L S G Q L L T E D Y Y  
UniRef90\_UPI0003638AF0 I S W E E A I T Y A A S E L K R I Q A K H H G R N S I G A I T S S R C T N E E T Y  
UniRef90\_Q1H3E9 I S W E Q A L D E I A S E K M D I K S N Y G N E A F Y L Q Y G T G V I G A T I A  
UniRef90\_B1VG96 L P M S R A V A E T A R R L R A I I D R D G P G A V A F Y L S G Q M S I E A Q Y  
UniRef90\_UPI000464E7E5 A S W D E A M S L V A R R F R E A V E A H G P G A V G F Y G S G Q Q L L T E E T Y  
UniRef90\_B4UF83 V S W E E A Y K H V A N E F R R I Q Y Q Y G R N S V G G I T S S R C T N E E T F  
UniRef90\_J3HR96  
UniRef90\_V9GRT5 T D W H T A V D E A A E R L K A I V I A K H H G P D T F A F Y L S G Q L L T E D Y Y  
UniRef90\_A3Y7M7 V S W D E A L N Y V S T R L S E I I K A K H H G S D A I M T T G S S R G T N E T N Y  
UniRef90\_E2DDK5 I S W D E A L N A E I A E R W S I L I A D D G A Q A I M L P Y S Y L G T  
UniRef90\_D8NXH5 A T W E E A L Q Y V A D N T S K L V D T Y G E E T V T L F A H G S G E H S F I E  
UniRef90\_UPI0003B7638D T E W D E A L S R V A K G F S D T I E Q F G P D S V A F Y V S G Q L L T E D Y Y  
UniRef90\_H2IKR0 V N W D Q A L D K M A S E I K R I I Q R S Y G R D S F A I V S T G Q L L T E E F Y  
UniRef90\_UPI000377F981 I S W D E A M Q K T A H K M L E I K K K D G S M L G L A L S K Y  
UniRef90\_H3MSD4 A S W N D A L D L V A R N F Q E A V R D H H G P D S V A F Y V S G Q I L L T E D Y Y  
UniRef90\_A0NWM4 A T W D E A L R R V V T G I R S T Q T A H H G S D A V G V F G G G G L T N E K A Y  
UniRef90\_C9ZEF5 V S W Q Q A L D A A A Q R L Q K V M H H G P Q A V A F Y G S G Q L L T E D Y Y  
UniRef90\_UPI00036B3676 V D W P E A I E Y A A Q R L N A V K A E Q G P Q A L G G L T S S R C T N E E V F  
UniRef90\_U5WKD8 V A I D A A I T H C A K R L R A I I D E H H G P D A V A V Y V S G Q M S I E A Q Y  
UniRef90\_E2DDD9 V E W D E A I T Y T A G R L M E I K K K Y G P N A I M G T G S A R G P N E A N Y  
UniRef90\_G7GKB6 T A V D E A I T S A R Q L R A I I D E H H G P D A V A L Y V S G Q M S L E A Q Y  
UniRef90\_H5EIS3 I S W D E A L D T T A S S L K K T V E Q Y G N E A V Y I Q Y S S G I V G G N M T  
UniRef90\_V2TGN5 T S W Q H A I E Q V S E K F K D C I E K Y G A E A I A F Y V S G Q L L T E D Y Y  
UniRef90\_UPI0003B6EEF3 I S W E Q A I N E I S A K M Q E V K S N Y G P D A F Y I Q Y A T G T I D A K F S  
UniRef90\_A9BV39 I S W E E A I A H T A R E F R R I Q A K H H G K D S I G G I T S S R C T N E E A Y  
UniRef90\_W0EAR7 V S W D E A Y T Y T A D K L Y N V K D Q F G G E A L A L A S R K G P H D W F F R  
UniRef90\_UPI00047847A5 T E W E E V L D L E G K F K E K M A Q Q G S D A L G I S S S K C T N E E S Y  
UniRef90\_B8FMR6 I T W D E A Y D E I A A K L N E L K D K H H G P E S V G F Y A G T G T Y E R S F K  
UniRef90\_S0G6R9 A S W D E A L D Y V Y G T R L K E I K E T H H G H A I A L G E R A Q M S T H V S I M A  
UniRef90\_A6C7E0 V D W D T A L S L F T R K G L Q Q K Y G D S V A F L S T G Q M V T E S K A  
UniRef90\_B8FN53 A S W G E A L D L V A S K F K E A I D K Y G P D S V A G V S C A R S I N E D S Y

UniRef90\_H5TY13 L S N K F T K G Y L R G I N I E S N S R L C M A S A G T G Y K Q S L G A D G P P 130 140 150 160  
UniRef90\_A6QAE2 A L G K F T Q L G L E T N N Y D G N T T L C C M A S A V A G V M G Y K Q T F  
UniRef90\_F4C4C8 V L N K L V K G F I G T N N I D T N S R L C C M S S A V A A Y K M T L  
UniRef90\_B7KFD9 I A Q K L L K G C L G T N N F D A N S R L C C M S S A V A G Y I Q S F  
UniRef90\_UPI000367F899 I A Q K L F K G C L G S N N F D A N S R L C C M S S A V A G Y I Q S F  
UniRef90\_Q28P87 L V Q K L A R G V F M S N N T D T C A R V C H S P T G Y G L G Q T F  
UniRef90\_A0L7Z7 P A D V A V S S A S S V L F P F G S P N T L G V G A L C Y V S F A M I A P H V T  
UniRef90\_UPI0003A238A9 V A N K L M K G Y V I G S A N I D T N S R L C C M S S A V A G Y K R A F  
UniRef90\_H0Q599 L V Q K L V R A A F G N N N V D T C A R V C H S P T G Y G L K Q T L  
UniRef90\_Q1H4J9 L A N K L I K G Y I G S N N I E S N S R L C C M A S A G S G Y K L S L G A D G P P  
UniRef90\_Q5E0S7 N C T A Q M Q R A V I G M H G N F I K K V G D Y S T G A G Q T I M P Y V L G S T E  
UniRef90\_UPI00035DA91C L A N K L A K G F V R T R N I E S N S R L C C M A S A G S G Y K L S L G A D G P P  
UniRef90\_UPI000364F353 V A N K L M K G F I G S A N I D T N S R L C C M S S S V V G H K R A F  
UniRef90\_N8VGH7 V V N K F V K G Y L G T A N I D T N S R L C C M S S A V A A H K R A F  
UniRef90\_G4I4U0 L A T K L A K G F I R T V N I E S N S R L C C M A S A A T A G Y K Q S L  
UniRef90\_T0CYU9 L M Q K L A R G S V M F T N I D N C S R Y C Q A P A T E A Y L R R T M  
UniRef90\_V5XB16 L A T K L A K G Y L R T V H I E S N S R L C C M A S A G T G Y K Q S L G A D G P P  
UniRef90\_C0D9I5 W Y R P I Y H R F A Y V F G S V N F G T D D S V C A V A K K I A D K V T A G C E  
UniRef90\_S6HY14 L V Q K L I R T A F G N N N T D T C A R V C H S P T G F G L K T T L  
UniRef90\_E1IBP3 Q M G V V D E R L W N R M G A S G L D R T T C C S A S H V A V P A T  
UniRef90\_A3X6S4 V A N K L M K G F I G T N N I D T N S R L C C M A S S V A G H K R A F G S D T V P  
UniRef90\_D3CV15 L A N K L A K G F I G T N N I E S N S R L C C M A S A G S G Y K L S L G A D G P P  
UniRef90\_A5L6B2 V A N K L M K G F I G S A N I D S N S R L C C M A S S V V G H K R A F  
UniRef90\_M9RC01 L V Q K M T R S T F G N N T D T C A R V C H S P T G Y G L K T T F  
UniRef90\_M2WS27 L A N K L T K G F I G T N Q I E A N S R L C C M A S A G T G Y K Q S L G A D G P P  
UniRef90\_UPI0003B58D8A L M Q K L S R S V M G T N N I D N C S R Y C Q T P A T Q G L F R T V  
UniRef90\_A6VQ09 M V Q K M V R T C F G T N N T D N C A R V C H S S A V E G L A K T L G  
UniRef90\_F5Z4X7 V A N K L M K G F I G S A N I D T N S R L C C M S S A V A G Y K R A F  
UniRef90\_J7QGf2 L V Q K L A R Q G F R N N N T D T C A R V C H S P T G Y G L A Q A F  
UniRef90\_A1UI27 L A T K L A K G F L R T K Y L E S N S R L C C M A S A A T G Y K Q S L G A D G P P  
UniRef90\_J3DA01 L I N K L A K G F V L G T A N I E S N S R L C C M A S A G S G Y K L S L  
UniRef90\_R1IN79 L V Q K L V R A G F G T N N V D T C A R V C H S P T G Y G L K T T L  
UniRef90\_F2NH78 Q M Q K L F R A V I K T N N I D H C A R T U H A P T V V I G L A T A F  
UniRef90\_UPI00046877AE L A N K L M K G F I G S A N I D T N S R L C C M A S S V A G H K R A F  
UniRef90\_F6DCH0 V A N K L T K G F M G T A N I D T N S R L C C M A S A V V G Y K R A F  
UniRef90\_B8EJ49 L V Q K L I R A G F G N N N V D T C A R V C H S P T G Y G L K T A F  
UniRef90\_G0A8X3 L V Q K L V R A A F G N N N V D T C A R V C H S P T G Y G L K Q T L  
UniRef90\_E1YDM7 D V F Q L T Y L A S S I L F P F G S P N T F G V I G A P C Y T S L G V L A P K L T  
UniRef90\_UPI000478AC1B T A E G M D R R F Y R L G A S Q L E R T I C Q S A G T V G Y S Y T M  
UniRef90\_W1N7Q6 V A N K L F K G F L G T P H L D T N S R L C C M A S A V A A Y K R S F  
UniRef90\_Q05V08 L A Q K L L K G A L G T N N F D A N S R L C C M S S A V A A Y T R S L  
UniRef90\_R7G3H8 W Y R P A L L R L A N A Y G S P N Y C T E S S T C F Q S A A M A W R  
UniRef90\_E1R268 H T A R L T S R F L S F G G Y T D T A G N Y S S E A S D F V K P F M Y  
UniRef90\_N9QLX1 V V N K F V K G Y L G T A N I D T N S R L C C M S S A V A A H K R A F  
UniRef90\_I3ZTGS L L Q K I A R L F G T N N I D N C A R L C H E A S V H A L K L A V  
UniRef90\_F7UWG8 G F L H R F M N L Y G G C L E G Y G D Y S H S Q I D A A I P Y L Y  
UniRef90\_E2EA43 I M Q K F S R A A I G T N N V D C C A R V U H G P S V A G L H R S V  
UniRef90\_F4GQD1 L V Q K L V R A A F G T N N V D T C A R V C H S P T G Y G L K T T L  
UniRef90\_V4HLH3 L M G K F A R Q V L G T N S V D N C N R L C H S S T V A G L A K T F  
UniRef90\_U4WKQ1 L V Q K L A R Q V F E T N N V D N C S R Y C Q S P A T D G L L S T V  
UniRef90\_Q1PVH1 L M N K L I K G C I G S N N I E S S T R L C M A S S A M G F M S T  
UniRef90\_S3XCY1 ME  
UniRef90\_J1F997 K A Q T L L Q R Y M S M A G G Y S G H L G D Y S T G A A Q I I M P H V V G S I E  
UniRef90\_J7GFLO S G N L G V M S Y A V E G M M S L G Y T T R F A G T P C W P A G L D A Q H Y D  
UniRef90\_UPI0004637B2F W Y R P A L L R F A N A F G S P N F C T E S S T C F Q A S A L A W K  
UniRef90\_K1JLM1 S A A T Y R F F N M I G G S L A W Y S D Y S T A C I Q N A W P Y L Y G R F D  
UniRef90\_W2EVJ1 E T G E A G R R F W N V L G A S R H D L N I C S R A G N D G L R Y V  
UniRef90\_D3P985 T F N K L W K G G F R S N M V E G N P R L C M A S A V G G Y I T T F  
UniRef90\_I5CB57 L V Q K L V R G A F G N N N V D T C A R V C H S P T G Y G L G Q A Y  
UniRef90\_H2ILU8 A A Q K F A R T V I G T N N I D H C A R I C H S P T V A G L Q Q V L  
UniRef90\_G8MBD1 V A N K L M K G Y I G S A N I D T N S R L C C M S S V A G H K R A F  
UniRef90\_UPI0003638AF0 L A N K L F K G F L G T P H L D T N S R L C C M A S A V A A Y K R S L  
UniRef90\_Q1H3E9 L V Q K L V R A A F G N N N V D T C A R V C H S P T G Y G L K Q T L  
UniRef90\_B1VG96 R S W P V V E T P F A R L M N L W G Y L N H Y S D Y S T A Q I T S A Y P H Y  
UniRef90\_UPI000464E7E5 L A T K L A K G F I Q T P H V E A N S R L C C M A S A A T G Y K Q S L G A D G P P  
UniRef90\_B4UF83 A A N K L F K A G L R T N H V E G N P R L C C M A S A V G G Y L S T Y G K D E P M  
UniRef90\_J3HR96 L V Q K L I R A G F G N N N V D T C A R V C H S P T G Y G L K T T F  
UniRef90\_V9GRT5  
UniRef90\_A3Y7M7 V A N K L A K G F I G T A N V D T N S R L C C M A S A V V G Y K R A F  
UniRef90\_E2DDK5 V M Q K F A R A V I G T N N V D C C A R V U H G P S V A G L H K R S V  
UniRef90\_D8NXH5 Q G I I N G L N V G D P L F N K L G A T V C E R T F C D S G S C T A Y M M T  
UniRef90\_UPI0003B7638D L V A N K L I K G F L G T A N I D S N S R L C C M A S S Y A Q C L G S R E I G W A L T Y  
UniRef90\_H2IKR0 V A N K L I K G F L G T A N I D S N S R L C C M A S T V V G H K R A F  
UniRef90\_UPI000377F981 T L G K L A R G V I G S N N Y D G N T T L C C M A S A V S G Y K R S F  
UniRef90\_H3MSD4 S G N L G V M G Y A V E G M M S L G Y T T R F A G T P C W P A G L D A Q N Y D  
UniRef90\_A0NWM4 V A N K L M K G F I G S A N I D T N S R L C C M A S S A V A G H R R A F G S D T V P  
UniRef90\_C9ZEF5 L L G K F A R V A L R T S A I D Y N S R F C M S S A A A V N R A F G L D R G L  
UniRef90\_UPI00036B3676 V A N K L M K G F I G A G N M D T N S R L C C M A S A V V G Y K R A F  
UniRef90\_W6K756 L V Q K M I R T A F G T N N V D T C A R V C H A P T G Y G L K Q A F  
UniRef90\_U5WKD8 L A N K L T K G F I G T N Q I E A N S R L C C M A G A S S G Y K L S L G A D G P P  
UniRef90\_E2DDD9 V M Q K F M R A A V G T N N V D H C E R I U H A P S V A G L Q Q S L  
UniRef90\_G7GKB6 L T N K L A K G F I G T N Q I E S N S R L C C M A S A G T G Y K  
UniRef90\_H5EIS3 R S S P S A S A V K R L M N C Y G S L N Q Y G S Y S T A Q I S C A M P Y T Y  
UniRef90\_V2TGN5 V V N K F V K G Y L G T A N I D T N S R L C C M S S A V A A H K R S F  
UniRef90\_UPI0003B6EEF3 D S W P P A A S P I A R L H N L W G S W L Q H Y S D Y S T S Q I T A A L C L I E  
UniRef90\_A9BV39 L V Q K L V R T A F G N N N V D T C A R V C H S P T G Y G L G Q T Y  
UniRef90\_W0EAR7 S I L G K A M G S P N T F S H E A S C P L T R N V A L D  
UniRef90\_UPI00047847A5 L M Q K L A R G V I G T N N I D N C S R Y C Q S P A T M G L W R T V G  
UniRef90\_B8FMR6 D A Y Q L T Y L A S S V L F P F G S P N T F G V I G A P C Y T S L G V L A P K V T  
UniRef90\_S0G6R9 A F L K A L G S P N H F T H D A L C K G S M N T A C R S M  
UniRef90\_A6C7E0 F L G A L A K F G M G M Q H G D G N T R Q C M A S A V T A Y K Q S F  
UniRef90\_B8FN53 Q M M K L F R S V F K T N N I D H C A R T U H A P T V A G L A T S F

UniRef90\_H5TY13 G S Y Q D F E H A D L F F V I G S N M A D C H P I L F 170 180 190 200  
UniRef90\_A6QAE2 G S D G P P G C Y E D F S K A D V L L L I G A N I A D N H P I L K L H I A K N  
UniRef90\_F4C4C8 G E D S V P V C C Y D D L L E L S D C A L L V A G A N P A W D C H P I I W R R R V I E K H  
UniRef90\_B7KFD9 G S D G P P C C Y D D L L E L T D C A F L I G T N A A D C H P I I V F N R L H K H  
UniRef90\_UPI000367F899 G S D G P P C C Y D D L E L T D C V F L I G T N T A E C H P I I F N R L E K  
UniRef90\_Q28P87 G T S A G T Q N F D S V E Q V D V A I I G A N P T D A H S P V F G S  
UniRef90\_A0L7Z7 F G E M L I S L E T D L P Q S E L I V L W G A N P A T D S P P M A  
UniRef90\_UPI0003A238A9 G E D L V P L C Y D D L E L A D M V V L V G S N T A W C H P I L F Q R L K A  
UniRef90\_H0Q599 G E S A G T Q T F D S V M Q S D V L V L V I G A N P T D G H P V F G S  
UniRef90\_Q1H4J9 G S Y Q D F D H A D V L F F V I G A N M A D C H P I L F  
UniRef90\_Q5E0S7 V Y A Q G T S W S E I L K H S D N I L W A T D P V K N L Q V G W N C E T H E S F  
UniRef90\_UPI00035DA91C G S A G T Q T F D F H A D V L F L V I G S N M A D C H P I L F  
UniRef90\_UPI000364F353 G T D T V P G N Y E D F E Q A D L L L L T G S N T A W C H P I I F Q R L K A A  
UniRef90\_N8VGH7 G E D L V P A S Y E D F E H T D M V V L V G S N T A W C H P V L L Y  
UniRef90\_G4I4N0 G S D G P P G S Y D D F D C A D L F F F V I G A N M A D C H P I L F  
UniRef90\_T0CYU9 G L G G D T G S I T D L S I S D L V I V G A N P A E A H P V L L S  
UniRef90\_V5XB16 G S Y T D F D S A N L F F F V I G A N M A D C H P I L F  
UniRef90\_C0D9I5 G A P D M A H I A N T F L G W N Y D G Y Y S H H L S  
UniRef90\_S6HY14 G E S A G T Q T F E S I R K A D S I V V I G A N P T D A H P V F G S  
UniRef90\_E1IBP3 L G A R H G P D P R D V L K S K L I L L W G N N P A T S G P H F  
UniRef90\_A3X6S4 G T Y A D L E E A D L L V L V G S N L A W C H P V L L H Q R L A A A  
UniRef90\_D3CV15 G S Y Q D F D H A E V L V I G S N M A D C H P I L F  
UniRef90\_A5L6B2 G T D T V P V C Y E D L E Q A E V V V I T G S N L A W C H P V L F Q R L R A A  
UniRef90\_M9RC01 G T S A G T Q N F D S V E E T D V I L I G S N P T D G H P V F A S  
UniRef90\_M2WS27 G S Y Q D F D H A D V F F V I G A N M A D C H P I L F  
UniRef90\_UPI0003B58D8A G Y G G D T G T I E D I K N A E L I I T V G T N T S E S H P V L A  
UniRef90\_A6VQ09 S G A M T N P I Y D I T H D V D A I L L V G S N P E E A H P V I G M  
UniRef90\_F5Z4X7 G E D V V P C D Y T D L E C T S L L V L T G S N T A W A H P V L F Q R L Q R A  
UniRef90\_J7QGf2 G T S A G T Q D F D S V D D A D V I L V M G A N P T D A H P V F G S  
UniRef90\_A1UI27 G S Y T D F D T N L F F F V I G S N M A D C H P I L H  
UniRef90\_J3DA01 G S D G P P G S Y Q D F D Q A D L F F F V I G A N M A D C H P I L  
UniRef90\_R1IN79 G E S A G T Q T F E S V Q K A D A I I V I G A N P T D G H P V F A S  
UniRef90\_F2NH78 G S G A M T N S F A D F P K A K G F F C I G T N M T E A H P V A A T  
UniRef90\_UPI00046877AE V I L R V G L D V E S L E M D A R A I V L W G F N P F Y T R V L L Y Q R L A A A  
UniRef90\_F6DCH0 G A D A V P C S Y E D L A L A D L L V L V G S N A A W A H P I L L Y Q K M T Q A  
UniRef90\_B8EJ49 G T S A G T Q D F D S I E E T D V M L V I G A N P T D G H P V F G S  
UniRef90\_G0A8X3 G E S A G T Q T F D S V M Q S D V I M I I G A N P A S G H P V F A S  
UniRef90\_E1YDM7 M G C L H I D M F S D V D N S D L I L V W G T D P S A S T P P E L  
UniRef90\_UPI000478AC1B G G S L G T D P E E T V H S K L L I L W G I N A V I S T N M H Q  
UniRef90\_W1N7Q6 G A D A V P C N Y E D L E A E L L V L V G S N L A W N H P V L F Q R L R V A  
UniRef90\_Q05V08 G S D G P P A C Y D D L D H C S V A V L I G T N T A E C H P V L F Q R L  
UniRef90\_R7G3H8 S I Y G N D I C F P D L H A Q T V E V W S N L Y H S N V G M  
UniRef90\_E1R268 G T D R V G L D V E S L E M D A R A I V L W G F N P F Y T R F G S E T  
UniRef90\_N9QLX1 G E D L V P A S Y T D F E Q T E M V V L V G S N T A W C H P V L L Y  
UniRef90\_I3ZTG5 G T G A Q T N P Y E D L E R F G V V L I W G Y N P A E T H P V  
UniRef90\_F7UWG8 G A R D S N T P S D V K N A K L L V L F G D N T L E T K M C G G G A S V  
UniRef90\_E2EA43 G N G A M S N S I C E M E E T K C L L I F G Y N A A D S H P I A  
UniRef90\_F4GQD1 G E S A G T Q T F D S V M H S D V V I V M G A N P S A A H P V F A S  
UniRef90\_V4HLH3 G Y G A A S V S M G D I E E T D C Y L I T G S N T T E A H P V I G T R  
UniRef90\_U4WKQ1 G Y G G D S G V I S D I A A A G L V I I V G A N P T E G H P V L A  
UniRef90\_Q1PVH1 G A D A P A C Y A D I E Q A D L F F L A G N M A I S V P A L F  
UniRef90\_S3XCY1 V Y S L Q T A H E V I L E N T Q V Y V M W G A D L K C N Q I D F K V A N R G N  
UniRef90\_J1F997 V Y E Q Q T T Y P V V L E H S D V V V L W G L N P I N T L K I A W S S T D C A G S M H T  
UniRef90\_J7GFLO M G D M W C N D P E D L F V K A K Y I I L W G A N P A W C  
UniRef90\_UPI0004637B2F S I Y G N G I C F P D L V H T K T L L W T S N L F H S N T P M G K M Y  
UniRef90\_K1JLM1 Y G G V R S K Y F S Q V K N A K L Y V T F G N N P A V T R A S G G G Q S  
UniRef90\_W2EVJ1 Y G T P G G M D P E T F A L S K L I L L W G T N T L T S G H H L  
UniRef90\_D3P985 G S D E P V G S Y A D I E S A K C I I L V G S N T S E C H P I I F R R L M R H  
UniRef90\_I5CB57 G T S A G T Q T F K S I S Q S D V F L V I G A N P T D A H P V F G A  
UniRef90\_H2ILU8 G S G A M T N S I K D I F E A E V I V I G A D P T E N H S V L G G  
UniRef90\_G8MBD1 G E D L V P M S Y E D L E R A D L I V L V G S N T A W C H P I L F Q R L V K  
UniRef90\_UPI0003638AF0 G A D A V P C N Y E D L E E A E L V L V G S N L A W N H P V L F Q R L R T A  
UniRef90\_Q1H3E9 G E S A G T Q T F D S I M K S D V I M V I G A N P T D G H P V F G S  
UniRef90\_B1VG96 G E W I G S N S F D D V A N S K L Q V M F G N N P L E T R M S G G G E T F V T Q  
UniRef90\_UPI000464E7E5 G S Y D D I D H A D V F L V I T G A N M A D C H P I L  
UniRef90\_B4UF83 G C Y E D L D H A D V M L L V G S N A A E A H P I L F E R M A R  
UniRef90\_J3HR96 G T S A G T Q D F D S V E H T D V V M V I G A N P T D G H P V F A S  
UniRef90\_V9GRT5 G S D T V P C N Y E D L E T C D L L I M V G S N A A W T H P V L L Y Q R L V A A K H S L  
UniRef90\_A3Y7M7 G N G A M S N S I V E I E T D L L V F V G Y N P A D S H P I P A D S H P I S H H  
UniRef90\_E2DDK5 I G H T P G V D P E S F V H A K Y I I L W A C N T L I S T N S H H  
UniRef90\_D8NXH5 G K P C G G K E P Y D S V N A K C I M L L G R N I V E A L H V G E L  
UniRef90\_UPI0003B7638D G M D T V P V C Y E D L E N K T D L V I L V G S N L A W C H P V L F Q R L R A A  
UniRef90\_H2IKR0 G S D G P P C C Y E D F E H T D C L I A W G S N L P E Q H P I I Y W  
UniRef90\_UPI000377F981 M G D M W C N D P E D F V K A K Y I I I W G A N P A W C A M H S  
UniRef90\_H3MSD4 G T Y E D L E A D L V L V G S N L A W C H P V L F Q R L E A A  
UniRef90\_A0NWM4 P F P L A D I A G T D C V L L V G A N P A D T M P P A  
UniRef90\_C9ZEF5 G G D A V P C N Y Q D L E R A D C V L V G S N T A W A H P V V Y  
UniRef90\_UPI00036B3676 G T S A G T Q D F D S V D S C D V A M V I G A N P T E G H P V F A S  
UniRef90\_W6K756 G S Y E D F D Q A D V F F V I G A N M A D C H P I L  
UniRef90\_U5WKD8 G S G A M T M G V P E I E N A A L L F V I G Y N G A D S H P I L V  
UniRef90\_E2DDD9 G S D A P G S Y Q D F D H A D V F L V I G A N M A D C H P I L F  
UniRef90\_G7GKB6 G S N D G N S T D I E N S K L V V M F G N N P A E T R M S G G G I T  
UniRef90\_H5EIS3 G E D L V P A S Y I D F E Y T E M V I L V G S N T A W C H P I L L Y  
UniRef90\_V2TGN5 G S W S N N T I T D A V N S L V L V W G N N P A N T R M G A G R H F T Y H L  
UniRef90\_UPI0003B6EEF3 G T S A G T Q T F K S I E H T D V V M V I G A N P T A A H P V F G S R M K K R L  
UniRef90\_A9BV39 T T F G T E A I A A D Y G N A K Y I I S V G R N W F E G I Q V A Q  
UniRef90\_W0EAR7 Y G G D S G I A N D D I A Q A E L I I T V G S N T A E S H P V L A  
UniRef90\_UPI00047847A5 M G C L H I D M Y S D L D N A D L I L V W G T D P S T S T P P A A  
UniRef90\_B8FMR6 F G Y T D G Q M G I N Y G N T K H I V L Y G R N I F E S I N V K E  
UniRef90\_S0G6R9 G G F S P F T Y Q D L E E S D V L V F V G A N P C I A H P I M W E R V M  
UniRef90\_A6C7E0 G S G A M T N S F G E F H K A K M F F V I G S N M T E A H P V A S T  
UniRef90\_B8FN53

UniRef90\_H5TY13 L R M M E R V K A G A K L V V V I D P R R T A T S A A K A D L Y L V L Q V K P G T D D  
UniRef90\_A6QAE2 K K E T G K K P T I I V V V D P R K S T S Q M A D I F L V Q L A Q P P G T D D  
UniRef90\_F4C4C8 K A N N P A V K K L I V V V D P R H V T T K T A E A S D A D L H L L A I Q P P G T D D  
UniRef90\_B7KFD9 K K N D R K A V K L I V V V D P R R T T K T A E A S D A D L H L L A I Q P P G T D D  
UniRef90\_UPI000367F899 Y R K K N R K V K M I V V V D P R R T T S T A E A A D L H L L A I Q P P G T D D  
UniRef90\_Q28P87 R L K A R V R A G A K L I V V I D P P R R S T D S S C H I E A A H H L L A I Q P P G T D D  
UniRef90\_A0L7Z7 H G Q L L A A K Q R A G A E L V I V I D P P R R S E S C V E A D A Q W Y P I R P P G T D D  
UniRef90\_UPI0003A238A9 K E A R P N M K L V V I V I D P P R R T A T S A E E L E A D A D L H L L P I K S G T D D  
UniRef90\_H0Q599 Q L K R R L R Q G A K L V I V I D P P R E T D G A H Y E P A Y F L M K L R P P G T D D  
UniRef90\_Q1H4J9 L R M M D R V K A G A R L V I V V D P P R R N A T A D K A H L F M Q I K R P P G T D D  
UniRef90\_Q5E0S7 Y A Y L E Q L K E K V A N L V S V D P V K N K T A Q R Y L Q N D H M Y I N P Q S D D  
UniRef90\_UPI00035DA91C L R M M D R V K S A G A R L V I V I D P P R R T A T A D K A D D L F L L P V I N P P G T D D  
UniRef90\_UPI000364F353 K K Q R P E M K V V V I V I D P P R R T A T C D I A D D L F L L P V I N P P G S D D  
UniRef90\_N8VGH7 Q R I M K A K E Q R D L F V V V V V D P P R F T S T A E A A D D L H L L P I L P P G Q D D  
UniRef90\_G4I4N0 L R M A D R L R A G A K L I V V I D P P R R T A T A D K A D D L F L L P I R Q P P G T D D  
UniRef90\_T0CYU9 T L R R A Q K K H G A R L I V A D L R K N I M A E R S A D I F L L R P R Q P P G T D D  
UniRef90\_V5XB16 L R M A D R L K A G A K M I V V V D P P R R T A T A D K A D D L Y L P I A P P G T D D  
UniRef90\_C0D9I5 V E G V R K L K E R G G K L V I I D I P R D T P A A K N L A E A V F L Q I N P P G T D D  
UniRef90\_S6HY14 L M R R R L R E G A S L V V I V I D P R R D I D T P H L L N E A V F L Q I R P P G T D D  
UniRef90\_E1IBP3 M P L L R E A Q R Q G C Y V V V V D P P R R S L T A Q H A D L F L Q I R P P A T D D  
UniRef90\_A3X6S4 K K A K P G M K V V V I V I D P P R R T A T T D L A D D Y H L R I V P P G T D D  
UniRef90\_D3CV15 F L R L M E R V H A G A R L I V V I D P P R R T A T A E K A D D L F L Q I R P P G T D D  
UniRef90\_A5L6B2 K Q A N P D M K V I V I V I D P P R Y T D S S C E I E A D D L H L A L E S G S D D  
UniRef90\_M9RC01 R M K K R M R Q G A K L I V I V I D P P R R T A T A D K A H I E A S H H L L P L A P P G T D D  
UniRef90\_M2WS27 L R M M E R V K A G A K L I V V I D P P R R N A T A D K A D D L F L L P L A P P G T D D  
UniRef90\_UPI0003B58D8A T R I K S S H K L R N Q K L I V S D I P R K H E M A E R S D M F I Q P K P P G S D D  
UniRef90\_A6VQ09 Q I R K E A V R K G T K L I V V I D P P R D T E G L T K Q A D I H L L K L R A P P G T D D  
UniRef90\_F5Z4X7 R L C R D M K V V V I V I D P P R E T E T C T I E A D D L H L L P L K P P G T D D  
UniRef90\_J7QGf2 R M K K R L R E G A K L I V I V I D P P R R T D S S P H I I E A D D Y H L L P L K P P G T D D  
UniRef90\_A1UI27 Q R M V D R L K T G A K L I V V I D P P R R T A T A D R A D D L Y L P I I P P G T D D  
UniRef90\_J3DA01 F L R M M N R V K A G A K L I V V I D P P R R S A T A D K A D D L F L P I R P P G T D D  
UniRef90\_R1IN79 Q L K R R L R S G A K L I V I V I D P P R E T D L A H V R A Q Y H L Q L R P P G T D D  
UniRef90\_F2NH78 F L K N A V L N G A Q L I V I V I D P P R R T K L A E M A D I H V P I K V G S D D  
UniRef90\_UPI00046877AE K E A R P D M R V V V I V I D P P R R T A T C D L A D D M H L R V A P P G T D D  
UniRef90\_F6DCH0 K R D N P H K K V V V I V I D P P R R T A T C D L A D D L H L L A K P P G T D D  
UniRef90\_B8EJ49 R M K K R L R A G A K L I V I V I D P P R R T D T P H V K A D F H L P L Q P P G T D D  
UniRef90\_G0A8X3 Q M K R R L R G A K L I V V I V I D P P R T T E M P H V E A D Y H L K L R P P G T D D  
UniRef90\_E1YDM7 F Q R L K A A S E E G A E I V I V I D P P R K T K A A G L E E G S E W L P I R P P G S D D  
UniRef90\_UPI000478AC1B I T L A Q K A R K K G A K I V V I D V H K N Q T G R L A D W F I P I R P P G T D D  
UniRef90\_W1N7Q6 K A R N K L M R V V V I V I V I D P R V T D S C E L A D D L Y L G I R P P G S D D  
UniRef90\_Q05V08 I K R K K R N P G S V T I V I V I D P P R R T D T T A K A A D I H L L P I A P P G T D D  
UniRef90\_R7G3H8 A R P Y Q A L K A R G A K I A V I D P P R E T V T T Q A A D I H L L K L P P G T D D  
UniRef90\_E1R268 Q Q F L L S L K R G A K I P F I V I D P P R R T A T S V R K L G A K W F P I R P P G S D D  
UniRef90\_N9QLX1 Q R I M K A K E E R D L F V V V I V I D P P R F T A T C E A A D D L H L L P I L P P G Q D D  
UniRef90\_I3ZTG5 M D Y L L R A K R K G A K I V V I V I D V R E T R T M A F A D H R L L K P P G T D D  
UniRef90\_F7UWG8 I Y L K D A I L D A G V R T I V V I D P R C S E T V A N C A D E W I A L R P P G T D D  
UniRef90\_E2EA43 A R R I L K A E A K G A K V I V I V I D P P R Y T I E T A R T A D I W L P L K N G S N  
UniRef90\_F4GQD1 R L K R R L R E G A R L I V I V I D P P R Q I D S S P H I K A D Y H L P V R P P G T D D  
UniRef90\_V4HLH3 I K R N V R D G A D L L V F D P R E V Q I A E H H A T Q Y S R V K P P G Y D  
UniRef90\_U4WKQ1 T R V K R A K K L H G Q K L I V S D L R K H E M A E R S D L Y L H P N Q G T D D  
UniRef90\_Q1PVH1 A R V Y A R S K Y K N D A K V I V I V I D P P R R S E T T G I L A D I H L L Q I R P P G T D D  
UniRef90\_S3XCY1 N P Y A D S K Y A K S N K F I V I V I D P P Q Y T P I A K K L N A Q W I K I R P P N T D D  
UniRef90\_J1F997 L E F F H Q L K K S G K T I I G I D P P T R S E T I E F F G E Q W I A P H P M T D D  
UniRef90\_J7GFLO M K Y I Y Q A R E K G A K V V V I V I D P P L F S Q T A A K A D D L Y L R V R S G S D D  
UniRef90\_UPI0004637B2F R S L K K R G V T I A V I V I D P P R S T V T T R E A D I H L K I T P P G T D D  
UniRef90\_K1JLM1 W E F F S A A R R N G T R M V F I D P P I Y S D T M A G R N A E W I P I R P P G T D D  
UniRef90\_W2EVJ1 W K F V Q D A R A A G A Y V V A I V I D P P I R T R T A D Q A D E H L P I R P P G T D D  
UniRef90\_D3P985 K M R N P E V K V I V I V I C E P R K T N T A K I A D L W L P V D P P G T D D  
UniRef90\_I5CB57 R M K K R L R A G A K L I V I V I D P R T I D S S P H V H A E H H L K L R P P G T N  
UniRef90\_H2ILU8 Q V M R A K L A G A K L I V I V I D P R V T R L A K E A D L H L L Q L T P P G S N  
UniRef90\_G8MBD1 M K E S R S D T K V I V I V I D P R H T A T A C E M A D L H L L P L K P P G T D D  
UniRef90\_UPI0003638AF0 K Q R N P L M R V V V I V I D P P R V T D T C E I A D D L Y L G V K P P G S D D  
UniRef90\_Q1H3E9 Q M K R R L R E G A K L I V I V I D P R A L T D G P H V K A D Y H L K L R P P G T D D  
UniRef90\_B1VG96 K I R K Q E H G K T I V I V I D P P R Q S E T S V A L A D E W V A L R P P G T D D  
UniRef90\_UPI000464E7E5 F L R M M D R V K A G A K L I V V I D P P R R T A T A E K A N L Y L R L R P P G T D D  
UniRef90\_B4UF83 R K Q T G K D V K V V V L D P P R R T P T A R L A D L H L L S E T P P G T D D  
UniRef90\_J3HR96 R L K R R L R R G A K L I V V I D P P R R D S S P H I S A A Q H L Q I R P P G T N  
UniRef90\_V9GRT5 K L W L E K L A Q K G T P V I N I S P M R D D C P A F V N A E W I P I R P P N T D D  
UniRef90\_A3Y7M7 K L R P W M K V V V I V I V I D P P R K T A T C D I A D D L H L L A I T P P G S D D  
UniRef90\_E2DDK5 A N R V I R A K Q K G A Q I V V I V I D P R K I E T A R I A D M H L L Q I R P P N G S N  
UniRef90\_D8NXH5 W P F I E Q A K K N G A K L V I V I D P V R T R T A R L A D W H L P I R P P G T D D  
UniRef90\_UPI0003B7638D Q D F I E G V H R G A H V I Y V I D P P R Y N K T A A K A N Q F M M I K P P G T D D  
UniRef90\_H2IKR0 K Q T N S N L K V I V I V I D P P R R N E S C E I A D D L H L L A I N P P G S D D  
UniRef90\_UPI000377F981 R L K E A L E K R K F P L I V V I D P P R V T M L A Q F A D I H L L A I T P P G T D D  
UniRef90\_H3MSD4 M K Y I Y Q A R E K G A K V V V I V I D P P L L T Q T A A K A D D L Y L R I R P P G S D D  
UniRef90\_A0NWM4 K A A N P G M R I V V I V I D P P R K T A T C A J A D L H L L Q L K P P D T D  
UniRef90\_C9ZEF5 L R H F T R L A D R G G R L V V V I D P P R R T R T A A R A D L H L L R P L P P G T D D  
UniRef90\_UPI00036B3676 Q R L A K A K A E R P E M Q I V V I V I D P P R N T A T C D I A D L H L L A L R P P G S D D  
UniRef90\_W6K756 R L K R R L R R G A K L I V I V I D P P R R D S S P H V R A D D H L L A I Q P P G T N  
UniRef90\_U5WKD8 F L R M M E R V Q A G A K L I V V I D P P R R T A T A D K A D D L F L Q I A P P G T D D  
UniRef90\_E2DDD9 A R R I V R A K E N G A Q I I C I V I D P P R I E T A R I A D M H L L Q L V N G G T D D  
UniRef90\_G7GKB6 L R M M D R V K A G A K L I V V I D P P R R T A T A D K A D D L F L Q I K V N G G T D D  
UniRef90\_H5EIS3 Y L L E K A R E K S N A K M I V I V I D P P R Y T D T A A G R E D E W L P I R P P G T D D  
UniRef90\_V2TGN5 Q R I M Q A K Q H R D V I V V V I D P P R F T A T C E S A D L H L L P I L P P G Q D D  
UniRef90\_UPI0003B6EEF3 Q K A K E Q N P N L K V V V V I D P H Y T D T A V A L D A D W V P V R P P G T D D  
UniRef90\_A9BV39 R G D G R R A G A K L I V I V I D P R E I E S P H I R A D Y H L Q L R P P G T N  
UniRef90\_W0EAR7 T R A V S K A L S N G A K L V V L D P R F S V T A S K G E W L P I K G A S D D  
UniRef90\_UPI00047847A5 T R V K R A Q K L H G Q K V I V A D L R K H E L A D R A D L F V Q P A P G S D D  
UniRef90\_B8FMR6 F S K L E R A A E E G A E I V I V I D P P R R T K S A D L P G A E W L P I R P P G T D D  
UniRef90\_S0G6R9 V N T L M D A L E K G A R L T Y I V I D P P R V N V T A G K A H R Y W M I R P P G T D D  
UniRef90\_A6C7E0 R N P S P E I I A V I V I V I D P R K T E T A M Q S S L H L L Q I Y P P K S D D  
UniRef90\_B8FN53 F L K N A V I Q S G A R L I V A D P R A H K L V D F A E L H L L Q I K V G S D D

UniRef90\_H5TY13  
UniRef90\_A6QAE2  
UniRef90\_F4C4C8  
UniRef90\_B7KFD9  
UniRef90\_UPI000367F899  
UniRef90\_Q28P87  
UniRef90\_A0L7Z7  
UniRef90\_UPI0003A238A9  
UniRef90\_H0Q599  
UniRef90\_Q1H4J9  
UniRef90\_Q5E0S7  
UniRef90\_UPI00035DA91C  
UniRef90\_UPI000364F353  
UniRef90\_N8VGH7  
UniRef90\_G4I4N0  
UniRef90\_T0CYU9  
UniRef90\_V5XB16  
UniRef90\_C0D9I5  
UniRef90\_S6HY14  
UniRef90\_E1IBP3  
UniRef90\_A3X6S4  
UniRef90\_D3CV15  
UniRef90\_A5L6B2  
UniRef90\_M9RC01  
UniRef90\_M2WS27  
UniRef90\_UPI0003B58D8A  
UniRef90\_A6VQ09  
UniRef90\_F5Z4X7  
UniRef90\_J7QGf2  
UniRef90\_A1UI27  
UniRef90\_J3DA01  
UniRef90\_R1IN79  
UniRef90\_F2NH78  
UniRef90\_UPI00046877AE  
UniRef90\_F6DCH0  
UniRef90\_B8EJ49  
UniRef90\_G0A8X3  
UniRef90\_E1YDM7  
UniRef90\_UPI000478AC1B  
UniRef90\_W1N7Q6  
UniRef90\_Q05V08  
UniRef90\_R7G3H8  
UniRef90\_E1R268  
UniRef90\_N9QLX1  
UniRef90\_I3ZTG5  
UniRef90\_F7UWG8  
UniRef90\_E2EA43  
UniRef90\_F4GQD1  
UniRef90\_V4HLH3  
UniRef90\_U4WKQ1  
UniRef90\_Q1PVH1  
UniRef90\_S3XCy1  
UniRef90\_J1F997  
UniRef90\_J7GFLO  
UniRef90\_UPI0004637B2F  
UniRef90\_K1JLM1  
UniRef90\_W2EVJ1  
UniRef90\_D3P985  
UniRef90\_I5CB57  
UniRef90\_H2ILU8  
UniRef90\_G8MBD1  
UniRef90\_UPI0003638AF0  
UniRef90\_Q1H3E9  
UniRef90\_B1VG96  
UniRef90\_UPI000464E7E5  
UniRef90\_B4UF83  
UniRef90\_J3HR96  
UniRef90\_V9GRT5  
UniRef90\_A3Y7M7  
UniRef90\_E2DDK5  
UniRef90\_D8NXH5  
UniRef90\_UPI0003B7638D  
UniRef90\_H2IKR0  
UniRef90\_UPI000377F981  
UniRef90\_H3MSD4  
UniRef90\_A0NWM4  
UniRef90\_C9ZEF5  
UniRef90\_UPI00036B3676  
UniRef90\_W6K756  
UniRef90\_U5WKD8  
UniRef90\_E2DDD9  
UniRef90\_G7GKB6  
UniRef90\_H5EIS3  
UniRef90\_V2TGN5  
UniRef90\_UPI0003B6EEF3  
UniRef90\_A9BV39  
UniRef90\_W0EAR7  
UniRef90\_UPI00047847A5  
UniRef90\_B8FMR6  
UniRef90\_S0G6R9  
UniRef90\_A6C7E0  
UniRef90\_B8FN53

250 260 270 280  
L A L L N G L L H L L I E A D N V D H D F V E S Y T E G F T A T K E F V S E Y T  
L A L L N G L L C Y I I M E A Q G K V D D W T F I I K E S R T N D G Y F K A F K K H H I M N N Y  
V T L L F H V I A K L L L E A G K K I D D W T F I I D E D E C H T D Q G F S E E Q L R D L V L T I S S  
I D L L N G L L A H L L M R E W G Y I D A G F F I D E R E R C S N F S S A Y A E E V I R H Y S R  
V A V V T A M A H V L I D E E K L Y D E N F V K N E R W T L G F F E E L A Q Y V E Q F H F H  
G A L A L G M I H V L I E E E L Y D E N F V K N E R W T L G F F E E L A Q Y V E Q F H F H  
V W L F N G L L S Y L S R I G A V A P D F V V L E H T N G F D A A L A A A S  
V A I A N A L A H V L V T E G L V Q P D F F I A E R F C D T A S F A M W R E F V A  
M A L L N G L L H L L V I K N G H T P D F F I A R F T E G W E A M P E F L E D Y S  
V A F M L A V A Y T L Y T E N D M Y D K K F I E T Y C L G F D E F M Q Y V L G E T  
L A L L N G L L H L L V I E N G H T D E E F L A E N H T E G F W E M P A F L A D Y P  
A F L F N G L L A Y L S R L G A I N Y E F L A E N H T E G F W E M P A F L A D Y P  
V A L F N G L L Q Y L W K N S H A D Q E F F I A E Q H T Q G L E Q A L V Q S E A E S  
L A L L N G L L H L L V I A A G A G R H D A E F F I A E N Y T E G W D A M P E F L A G Y P  
L V W L S G V T K Y I I D Q A G R H D A E F F I K A N R V T G F E Q Y V A S L E K Y T  
L A L L N G L L H L L V V N G D I D E E F F I A E Q H T E G W Q D M P A F L A D Y P  
G A L A L G M A K L I D N G W A D M E S F V E Q E R Y T Y G T Q A F K N E L A E  
V A L I N A L A H V I M R D N L Q N D S F I Q E R C D T Q A F K N E W K A F I S  
A A L A L G L M H V I F A E G L Q D Q A F W L E A H A H G W R E L Q E R A A L Y P  
T A V F N G L L T Y L A D T D G L D G A F L K A H H V T G R W R P A I T Q A R L A D Y P  
L A L L N G L L H L L V I E G G H L D E T F I A E H H T D G R D Q M P G F L A D Y P  
V A L F N G L L A Y L D D N D Q L D S D Y I E N H T Q G F T E A I R T A T D Y R  
V A V L S S I A H V I V T E G L M D E D F F I R T R C D W D E F A H Y A E F I S  
L A L M N G L L H L L V E N G H T P E F I A E F T D G W D A M P E F L A D H T  
L V W L N A V A K Y I I D Q G W E D T E F F I N E R V D Y Y E D F V K E L E M Y T  
I A F A N G M C H I F L K N G L I D E E A A E R T E G F K E L K K I V K D Y T  
V A L F N G L L Q F A H N N G A I D E E A A G E F T Q G L N D A I T S  
V A M I A A L A H V I V T E N L V N L D F V K S R C D W D E Y Q D W A E F V S  
V A L L N G L L H L L V E R G D I D E E F F I A E H T E G W A H M P E F L A D Y A  
L A L L N G L L H L L V K N G H T P A F I A A F T E G W D A M P E F L E D Y P  
V A V L N A L A H V I I N E G L E D T S Y I E A R C C D M A A Y K K W R D F I A  
V A F L N G L L M Y L I T E N D L Y D Q K Y V E A C C C T G F E A L K A K V R E Y P  
V A L F N G L L S F L A G E N H L D A R Y I D A H V N G C T A A L A Q A R A T D  
A L L F N G L L A Y L A K Q D C L D A R F I I E H T E G F V L A L A Q A E A T A  
V S V V T S L A H V I V T E G L V N E A F V R E R C D W S E F Q D W A A F V S E  
V A V V T A L A H V I V T S E G L E Q V D F F I A E R C D R Q S Y A D W K A F V L R  
G A L A L G L S H I L I R D N L Y D K H F V E N W T F G F D E F H D Y V K D F T  
G A L A L A L M H L L F N D K K G R L D S E F L Q R N H T N G F E E A L R H H V Q Q Y T  
A R L F N G L L A W M A K K G R L D S L Y L Q R N H T N G F E E A L R A A R E G E  
L A L L H G L A H L V M R E N G Q D V A F I D D H T E N Y K P F F D V V A R W T  
G A L A L S M A Q V I T E E G L Y D K E E F V E K Y V Y G F E E Y K A Y V N G A P  
G V L L S A L I H H L A E R D R F D R S L L E R Y T V G F D R L E A H L S G A V  
V A L F N G L L Q Y L Q Q N G H A D L D F V T Q H T Q G L E Q A L S S S  
I V L A N A M A N V I T R E E L Y D E E F V K T R T S G F S E Y K M G V M K Y T  
G A L A A A M A N V M I T R E N S V D Q D F L N T Y C I G Y D Y K S Y L G H G P  
V A L L N A F A N V L I S E N L Y N K E F V E S H T E G F E K Y C K N I E K Y T  
T A V L T S M A H V I A T E G L I D E A Y V A E R C E P L A F Q Q W R D F V S  
A V W I N G I T R Y I V N D N L Q D E E F F I A E R T T G F E P E E E P E H D S A  
F V W L T A V A K Y I I D Q G W H D V D F L A K R V N Y L E E Y K E A I Q N Y T  
V A L N N S I A H V L I K E G Y V N E K V I A E Y A S G I K D L K E L S E E Y P  
V A L M L G M M H V L Y T S N Q Y D K N F I E K Y T V Y G F D K F L P Y L L K T E  
V A M M G I A H S L I K Q G K H D K A F L D K Y T V G Y D R F E A Y L L G K E  
G A L A L G M A R H L V D T G R V D Q E F V N F A H G Y P E F E Q Y L L N N I  
G A L A L A M A H V I I E E L Y D K E F V D K Y V Y G F E E Y K N Y V S T F T  
A A L C E A I A Y V L I T E N L V D K A F I G R Y T I G Y D Y R S H I L G L G P  
A A L A L G L L H V V L E E G A E D R D Y I E R H T L G W E E F A A E L A K Y P  
L A I F H S M A R E I K N W H D K K F I D E R H T R G K N V Y T F D K Y V E F  
V A V L T A M A H V I V T E H L L D T A Y V S E R C D T Q S F T D W L T F V R R  
I A L I N A M I H V I L S N H W H D E E F F A G R C G F E S L E K H V I E G I T  
V R L F N G L L A F L A E H G A T D A A F V D A H T Q G F D A A L A A  
A R L F N G L L A W M E S K K R L D Q V Y L A Q Y T Q G G I D D A L A A A R  
V A L T A L A H V V V T E G L V D E A F V R E R C E W D S Y Q Y W S E F V  
A A L V A G L I H V V M L T E N L Q D Q K F L D K Y T V G F D E H A Y V M G K V P  
L A L F N G L L H L L H R N G H T D S A F I A A H T E G W D A M P A F L A D Y T  
L A I L N A M A N V L V A E G L V D E A F V K A H H V E G K D V N R A W D Y R A  
V A V V T S L A H V I V T E G L F D E K F I R E R C D W E E F R Q D W A S F V  
V A L M L A L A Y E I Q R L D G H D E A F L A T H C V G Y G Q L A D Y I R G A N  
A A I F S Y L L V A S A D T K H L D T A Y I D Q F T N G F E G C I A N A R K V T  
I A L L N A L G H V I I E N N L Y D Q S F V A E R T E G F D E Y R K I V A G Y P  
G A L A L A M M H I I K E G L I D R D Y I D Q H T L G F D E L A G R V Q E Y T  
S A L L M G M I H H I L Y K N G L Y N K G F T D W Y T S G I N E L A Q S V R E T S  
V A L F N G L L V H L G E H N L V D H A F I S A A T N G F S E A Y Q S A L N G S  
V V L Q N A L L H V I L A E G L E D R D Y I D E N T T G F E E L A A E V Q N Y D  
G A L A L G M C R Y L L D N G L V D R D S F V N N Y S H G Y T E F E A Y L R Q Q  
V A L F N G L L S F L A E A N L V N D S Y V K R F T E G L E A A V I E A  
L A L A L G M L S I A L A E G H V D E D F V A S R T T G F E A V R T  
A A L F C G A L N A M A A G N K L D T D F V Q Q H T Q G A P E T L L A T Q A W T  
V A V V N A L A H V V M T E N L A D R T F I A Q R C D P V S F A A W E S F I  
L A L L N G L L Q L I V E N G H T D P H F I A E F T E G W E V M P S F L E Q F T  
L L L V N A L A N V I L E E G L C D Y D F I E K H A N G F D E F K E I L K K Y T  
L A L L N G L L H L L I E N G H T D P G F I A D F T D G F E Q L P E F A A Q Y P  
A A L V A G I A W V L I N E N L V D Q P F L D K Y C V G Y H Y K A Y I L G E G D  
V C L F N G L L Q Y L Y K H G Y Q D H F V Q A N T D D L A D A L F A S  
S A L V A G M A Y Y L V Q E G L V D E A F W L A E R A V G W D Y K A Y I L G D G P  
V A M I T S L A H V I V T E G W L A E D Y I A E R C D A K S F A Q W K E F V A R  
L A F V M A M A N L I K E N L Y D Q D F V S Q Y T V N D F D K W A E A V D K D T  
L V W L S A V T K Y I I D Q G W Q D D F F L E Q H V N D V E A Y M S L D K Y T  
G A L A L A L A H V I I R D D L H D V E F T E N W C R G F E E F A E Y V K D F T  
L A L N Y A L M N V I K E R L Y D K S Y I D K W L H G F V E F Q D  
L P L F Y G I A R V I I E Q G A I D E Q Y I Q E H T E G F Q E F A A H V A E Y S  
I A L L N G L L M H V L I K E E L Y D K K F V Q S C T V D F E N L K A Q T A N Y P

UniRef90\_H5TY13 P A F V S E T T G I P E A D I R T A A T W I G E S T N W M S C W T M G 320  
UniRef90\_A6QAE2 P P E V V A R R I C G N I P I E D Y I Y R A A A E Y I G S A N A F L S M W T M G  
UniRef90\_F4C4C8 V S E A S D R I C G N I P I E D Y I Y R A A A E Y I G S A N A F L S M W T M G  
UniRef90\_B7KFD9 P E V V A R R I C G N I P I E D Y I Y R A A A E Y I G S A N A F L S M W T M G  
UniRef90\_UPI000367F899 Q E V V A R R E C G I S V I E D L E T A A R Y W G E S E R V L S L W S M G  
UniRef90\_Q28P87 D V R H S P E M T E M L T G V P A E E L R R A A R L Y A T G G N G A I Y Y G L G  
UniRef90\_A0L7Z7 P D V V A E I T G V P A E Q V R N I A R K I A N A G A C P V M Y G  
UniRef90\_UPI0003A238A9 I D C A D P A A V A K V C R I D P A L L E F Y E A F A A T A K T I T A Y S M G  
UniRef90\_H0Q599 R P E N S P E A T A D I T G V P A E A V R G A A R L Y A G G G N G A I Y Y G L G  
UniRef90\_Q1H4J9 P E A V S E I T G I P E A D I R Q A A E W I G K A S N W M S C W T M G  
UniRef90\_Q5E0S7 D K V V K T P E W A S E I C G V S P E Q I R E F A K M M S T G R T Q I L L F G W C  
UniRef90\_UPI00035DA91C P A K V A E I T G V P E A D L R R A A R W I G E A G A W M S C W T M G  
UniRef90\_UPI000364F353 G D I V T V A R Q C G I R E S E V A T L F D W F R R T E K S V S V Y S Q G  
UniRef90\_N8VGH7 P I Q E V A Q R T G I A V E K L Q T F Y Q K F A E T E K V M T L F S M G  
UniRef90\_G414N0 P A K V A E I T G L A E A D I R T A A T M I G E A G E W M S L W T M G  
UniRef90\_T0CYU9 L D Y T S E V T G L S K E Q L I A T A E M I M N A K S V A V C W A M G  
UniRef90\_V5XB16 P A R V A A I T G L D E A D I R T A A S M I A E A G E W M T C W T M G  
UniRef90\_C0D915 E Y T L E K V S E I T G L D P E D I Y E A A R L Y A T N G P A C T N Y S A  
UniRef90\_S6HY14 P E R N S P E A T A D I T G V A E I R A A E L V V K A A Q T Y A N A G N G A I F Y G L G  
UniRef90\_E1IBP3 P E R V A H L T G L D A E V I V A L A R R Y A T T K P A M L K F A D G  
UniRef90\_A3X6S4 P L E S G L S E A E L A Q F Y R L W A G T Q K V V T L Y S Q G  
UniRef90\_D3CV15 P S T V A E R T G L T E A D L R R A A E W I A D A G A T W M S C W T M G  
UniRef90\_A5L6B2 Y T E S G W G N K S V P E L T G L S E Q Q Q F Y H L F A S N E K V L T I Y S Q G  
UniRef90\_M9RC01 D P R H S P E A T A M L T G V D A N E L R A A A I L L F A T G G N G S I Y Y G L G  
UniRef90\_M2WS27 P Q R V A E I T G L A E D D I R T A A R W I G E A G D W M S C W T M G  
UniRef90\_UPI0003B58D8A I D Y A V E Q T G L S R E E L I G I A E S I H E A D T T C A L W A M G  
UniRef90\_A6VQ09 P E R V A A K I C G I D P D D L R A A A R I Y A T A K K A P I I Y C L G  
UniRef90\_F5Z4X7 A N T I D A K I C G I D P D D L R A A A R I N T F Y D W F I N A D T A V I F Y S M G  
UniRef90\_J7QGf2 L P K N S P E A L E S V L G V P A A D I R G A A R L Y A T G G N G A I Y Y G L G  
UniRef90\_A1UI27 P A R V A A I T G L A E A D I H R A A A M I A E A G D W V T C W A V  
UniRef90\_J3DA01 P A K V A H F T G L P E A D I R Q A A Q W I G E A A Q W M S C W T M G  
UniRef90\_R1IN79 D E H H S P E A M E S A T G V P A M L I R E A A R M Y A K A G N G A I Y Y G L G  
UniRef90\_F2NH78 P E K A A P I V I G I E P E L R V V A R R M A A V K P Q M L I Y T L G  
UniRef90\_UPI00046877AE P A D A G V P A D A L D A F Y R L W A Q T K K V V T V Y S Q G  
UniRef90\_F6DCH0 D T D L A V L A A D C G V S E S D L N K F F A W F A Q T P R T V T F Y S Q G  
UniRef90\_B8EJ49 P R H S P E E V E K I S G V P A G L I R G A A R L Y A T G N A A I F Y G L G  
UniRef90\_G0A8X3 P D N S P E A M E A I T G I P A A E M R G A A R L F A T G N G A I F Y G L G  
UniRef90\_E1YDM7 P E Y V S K I T G I D K N R I E R L A E S I A E A E G A S Y V M Y T G  
UniRef90\_UPI000478AC1B P E W A A S I L E A V A D C D V D T R L E T F Y Y W F A S Q H V V T L Y S Q G  
UniRef90\_W1N7Q6 P R K V A R F C G I P E K R L R E V I A E L F H R K Q R V L S L W S M G  
UniRef90\_Q05V08 P E K A E K I T G V D K K L I R E A A R M Y A S N G P A G V M F S A S P V V H N  
UniRef90\_R7G3H8 D G V V R D I E W A P L C G L S T D D I R F L A D F F A D T K P A L L S G L S  
UniRef90\_E1R268 S T E S S I E S V A R R T G I A I E K L I L F F Q K F A Q T E K I M S L F S M G  
UniRef90\_N9QLX1 P E Y A E K V T G V P A E T I R E V A R E F A L A A G S G A I M W G M G  
UniRef90\_I3ZTG5 D G L P K T P Q W A S I E T G V P S A Q I V K L A R E I A A A K P C I Y Q Q K G  
UniRef90\_F7UWG8 P E Y V E Q I T G L S A K Q I R E A I R M Y A A A P S A T I L W G M G  
UniRef90\_E2EA43 L P E N S P E A M E A E T G V L A P A D L R G A A R L Y A T H G N G A I Y Y G L G  
UniRef90\_F4GQD1 D D Q E F T P E R V E A E I T G V P A E E I A S A A E T I A A D T C V F W T L G  
UniRef90\_V4HLH3 L E Y A E K V T G L S Q E Q L K E T A K M T C E A D G T C V L W G M G  
UniRef90\_U4WKQ1 P S R A S E I T G C P E Q L I T D A A R M V I G R S K A M L I F W F Q G  
UniRef90\_Q1PVH1 D M V E K T P S W A S K I T G I D E K V I K S L A D T F V K N R T F L A G N W A  
UniRef90\_S3XCY1 D G V E K S A Q W A E G I C G V P A K Q L E T L A E I F S N H R T M L M A G W G  
UniRef90\_J1F997 T V E W A S E I T C G L A P D V I R Q L A E E F T A V K P S T V W I G Y G  
UniRef90\_UPI0004637B2F P E R A C E I T G A D A E L I R K A A R L Y A C N K P S G I Q F S V S T  
UniRef90\_K1JLM1 D K T P K T P E R A A G I T N V P A E R I V R L A R D M A A K P C I S Q G W A  
UniRef90\_W2EVJ1 V E R V A E I T G L P A D R I R A L G V R L A H T R P T G L R A T M G  
UniRef90\_D3P985 L E Q F T P E T V E K L S R C P A E N I R K A A K W F A T S G A S M T L W T M G  
UniRef90\_I5CB57 P E N S P E A T A E I T G V S A E T V R G A A R L Y A T G K S A I Y Y G L G  
UniRef90\_H2ILU8 P E S V E S V T G V E A N K I R Q A A Q Y Y S Q S E R A M L I Y G M G  
UniRef90\_G8MBD1 A P S D L A Q T A K D C K L D Q H D L M T F Y R L F A R T E R V V T V Y S Q G  
UniRef90\_UPI0003638AF0 E D D C S I E A I A T D C D V D P E R L E T F F Y W F A T Q L H V V T M Y S Q G  
UniRef90\_Q1H3E9 A Q P E H S P E A M Q D V I G V P A Q D L R A A A R L Y A T G N A A I Y Y G L G  
UniRef90\_B1VG96 D G I E K T P Q W A A K V T G V P A D R I T Q A R E I A Q A K P C I T Q G W G  
UniRef90\_UPI000464E7E5 P R H V A S V T G I T E A D L R Q A A L W I G E A G E W S F W T M G  
UniRef90\_B4UF83 F L A P Y T P V R A A E L T S G A R A E D I V T A A R W F G E R T A T S M W C M G  
UniRef90\_J3HR96 S P E H S P E A I E E L T G V N P E Q T L R E A A R L F A T G N G A I Y Y G L G  
UniRef90\_V9GRT5 D G I A K T P D W A S S I T G I P A A R I A Q L A Q Q L I G V R S F M T C S Y S  
UniRef90\_A3Y7M7 P D L K S T A E F C G I A A D D L E L L V Q L W C S K E K T V S F Y S Q G  
UniRef90\_E2DDK5 P E S V E I T G V T A A E I R S A A R M Y A K A K T A I L W G M G  
UniRef90\_D8NXH5 P E F A A A E T G I P V E D I L K L A R E Y A T T A P A V V R I G V A  
UniRef90\_UPI0003B7638D P A W A S K I T E I P E E E I I E A A E Q L A K A A P H C Y I H P G R R  
UniRef90\_H2IKR0 E V S E V T G I D L A S L Q E F Y E C F S Q T E K V I T I Y S Q G  
UniRef90\_UPI000377F981 P E T A S K L C G I D A E T I R T V I A R Y Y A K A D R A M S I W T M G  
UniRef90\_H3MSD4 C E T I V E W A A E I C G L S Q D V I R T L A E E F T A K P S T V W I G Y G  
UniRef90\_A0NWM4 A G P C E I T G Q I A E K I C G L K R Q D I A L F Y K M I A R T E K T V T V Y S Q G  
UniRef90\_C9ZEF5 T A M E Y W P A R A E G L T G V P A H Q I R A A V R M F A Q A P T M V L T A R G  
UniRef90\_UPI00036B3676 P E T T A D Y C G L P L S Q L Q A F Y Q L L A R S Q R L V T L Y S M G  
UniRef90\_W6K756 S G P E N A P E A L E Q T T G V P A T E I R A A R L Y A T G N G A I Y Y G L G  
UniRef90\_U5WKD8 P E V V S E I T G I P V E D I R T A A R W I G E A A N W M S C W T M G  
UniRef90\_E2DDD9 P E S V S E Q T Q I S A D D I R K A A R M Y A A S G R S M L L Y G M G  
UniRef90\_G7GKB6 P D A V A E I C G I D A D D L R R A A E L I G T A G N W M S C W T M G  
UniRef90\_H5EIS3 D N T A K T P Q W A S Q I T G I P V D R I I K L A R E I G T K P A Y I C Q G W G  
UniRef90\_V2TGN5 K N E V N I A A V A D K T G I S L E S L T Q F Y E K F A Q T E K V M T L F S M G  
UniRef90\_UPI0003B6EEF3 D G T A K T P E W A A V T G V S V S L I K S F R L M E E S P A M V I Q G W G  
UniRef90\_A9BV39 P E N S P E A M A E V T G V A P D L V R G A A R L Y A P V N A A I Y Y G L G  
UniRef90\_W0EAR7 P E W A E K E T G L S K D K I I Q I T R E F A A A K P K A L L D F G W R  
UniRef90\_UPI00047847A5 L A Y A E E V T G M T R D E L I E I A T S I H E A K T A E A D G A T Y V M Y T G  
UniRef90\_B8FMR6 P E Y V S E L T G I D A D R I E E L A E S I A E A D G A T Y V M Y T G  
UniRef90\_S0G6R9 F L K D Y T P E W A E Q E T G I P A N E I K S L A R E I S K V K P G V I F H Y G  
UniRef90\_A6C7E0 L E R V I S E T G L S Q E T A I E K F A D L I K S G K R V S F W T M G  
UniRef90\_B8FN53 P E K A A E I T G I A P E V I V D A A R R L A S V K P V M L C Y T L G



UniRef90\_H5TY13 L V N Q S S I H G T W H T N A L T N L H L A T G N I C R L G S G P F S L T G Q P N A  
UniRef90\_A6QAE2 L N Q S S V I G T D T V S A L C N L A L I T G N I G G K E G S G A P M S S L T T G Q Q C N A  
UniRef90\_F4C4C8 L I N Q S S V I G T D K V V S L I L N L H L L T G T G N I G G K P G S G A P L S S L T L T G Q Q P N A  
UniRef90\_B7KFD9 L I N Q S S E F G T A K V V R T I I L N L H L L M T A N I G G K P G S G A G P F S L T L T G Q Q P N A  
UniRef90\_UPI000367F899 L V N Q S S T Q G G S T T A K V V R T I I L N L H L L M T G Q I G G K P G S G A G P F S L T L T G Q Q P N A  
UniRef90\_Q28P87 L V T E Y S H S Q G G S T T A I R V M G I A N L A M M T G N I G G R E G V G V N P L R M L T G Q Q N N V  
UniRef90\_A0L7Z7 L V T E Y S S D S G V Q A I R V M G I A N L A M M T G N I G D V P G G L L I R M L T G Q Q N N V  
UniRef90\_UPI0003A238A9 L V N Q S S S A G T D K V N A I I N C H L I G G R V I G G Q P G M G P F S P L T G Q Q P N A  
UniRef90\_H0Q599 L V N Q S T H S Q G G S T T V M G I A N L A M A T G N V I G R L P G V G V N P L R M L T G Q Q P N A  
UniRef90\_Q1H4J9 L V T E Q S T H G T W H T N A L C N L H L A T G A I C R R P G S G P F S L T L T G Q Q P N A  
UniRef90\_Q5E0S7 L I Q R Q S T H G E Q P Y W M G T V L S A M T G Q I G L A G G G V S Y S H H Y S S V  
UniRef90\_UPI00035DA91C L I N Q S S T H G T W N T N A L I D L H L A T G A I C R P P G A G P F S L T L T G Q Q P N A  
UniRef90\_UPI000364F353 L I N Q S S S G S D K V N A I I N C H L A T G R I I G G K P G M G P F S L T L T G Q Q P N A  
UniRef90\_N8VGH7 L V N Q S S T Q G V N K A N S I I N C H L L T G K I I G G K L G A A P F S M T G Q Q P N A  
UniRef90\_G4I4N0 L V N Q S S T H G T W N T N A I C N L H L A T G A I C R S P G S G A P F S L T L T G Q Q P N A  
UniRef90\_T0CYU9 L L N Q S T H L G G S D T S T A I C N L L L L V T G N A I C R P G R P G T G A Y P L T G Q H N N V  
UniRef90\_V5XB16 L L N Q S T H G T W N T N A I C N L L L A T G A I C R P G S G P M S L T L T G Q Q P N A  
UniRef90\_C0D9I5 L V Y H H I N G F N S H R A I L C L S A L T G N F D R V G G N Y P I P A R G S Y L R Q  
UniRef90\_S6HY14 V T E H S Q G G S T T V M G I A N L A L V T G N I G R E G V G V N P L R M L T G Q Q N N V  
UniRef90\_E1IBP3 I Q R H T N Q G G Q T V R A L C C L P A V V G Q Y G V P G G G L N Y S T S G Y I K  
UniRef90\_A3X6S4 L V N Q S S T Q G T D K V N A I I N C H L A T G R I I G K P G G P F S A T G Q Q P N A  
UniRef90\_D3CV15 L V N Q S T H G T W N T N A I I N C H L A T G A I C R R R G A G P F S L T L T G Q Q P N A  
UniRef90\_A5L6B2 L V N Q S T Q G C D K V N A I I N S H L A T G K I I G K P G M G P F S L T L T G Q Q P N A  
UniRef90\_M9RC01 L V T E H S Q G G S T T V M G I A N L A M M T G N L I G K N G V G V N P L R M L T G Q Q P N A  
UniRef90\_M2WS27 L V N Q S T H G T W N T N A L C N L H L A T G A I C R T R T G S G P F S L T L T G Q Q P N A  
UniRef90\_UPI0003B58D8A L V T Q H S T G G A D T S T A L S N L L L V S G N Y G R N G T G A Y P L R L T G H N N V  
UniRef90\_A6VQ09 L V T E H S T G T E G V M S M S N M A M S V G K L I G G R E P G C G V N P L R L T G Q Q P N A  
UniRef90\_F5Z4X7 V N Q S S A G V D K A N A I I N C H L A L D F I I G G K P G C G P F S L T L T G Q Q P N A  
UniRef90\_J7QGf2 V T E H S Q G G S T T V M G I A N L A M A T G N I G R R G V G V N P L R L T G Q Q P N A  
UniRef90\_A1UI27 M N Q S T H G T A N T N A I C N L H L A T G A I C C R P P G A G P F S L T L T G Q Q P N A  
UniRef90\_J3DA01 L N Q S T H G T W N T N A L C N L H L A T G A I C C R P P G S G P F S L T L T G Q Q P N A  
UniRef90\_R1IN79 L V T E H S Q G G S S A V M A L A N L A M A T G N V I G R E G V G V N P L R L T G Q Q N N V  
UniRef90\_F2NH78 I T E H T C C G T D N V L S T A N I Q M L L G N V I G G F E C G G V N P L R L T G Q Q N N V  
UniRef90\_UPI00046877AE L V N Q S S A C G T D K V N A I I N C H L A T G R I I G G T P G A G P F S V I T G Q Q P N A  
UniRef90\_F6DCH0 V N Q S S S G V D K S N A I I N V H L A T G R I I G K P G A G P F S I T G Q Q P N A  
UniRef90\_B8EJ49 V T E H S Q G G S T T V L I A N L A M A T G N L I G R P G V G V N P L R L T G Q Q N N V  
UniRef90\_G0A8X3 V T E H A Q G S T T V I G I A N L A M A T G N V L I G R E G V G V N P L R L T G Q Q N N V  
UniRef90\_E1YDM7 L E Y T K S G V Q N I R A V M V L W A L A G Q L D V E G G R C F A R R E N  
UniRef90\_UPI000478AC1B L V H H D N G G M S L R T I A C L P A L L Q W Q Q G G G  
UniRef90\_W1N7Q6 L V N Q S T S G T D K C H T I I N C H L A G G K I I G G L P G A G P F S L T G Q P N A  
UniRef90\_Q05V08 V N Q R R E G T A V V Q G L I N L H L L T G Q I I G K E G A G P F S L T G Q P N A  
UniRef90\_R7G3H8 I L N Q S T N G M E Q N Y R A V M C L L A L T G N Y A D I P G G N P S R P G P V S  
UniRef90\_E1R268 V Q R T L G G E E A D R L A G I L Q L V S G N A W L P G G N L G C G Q  
UniRef90\_N9QLX1 L V N Q S S Q G V D K A N S I I N C H L L T G K I I G K P G S A P F S M T G Q Q P N A  
UniRef90\_I3ZTG5 L T Q R H V S G V E N V L A V I N L A L L L G Y I G E K G G L Y P M R T G S D F E  
UniRef90\_F7UWG8 P Q R Q A N G E Q T A R A I A M L S I L L T G N V I G G L P G G G  
UniRef90\_E2EA43 V T Q W S Q G V D T V R C L T S L A L M T G N L G R Q N V G V A P V R L T G Q Q N N V  
UniRef90\_F4GQD1 V T E H S Q G G S T T V M A L A N L A M A T G N L I G R E G V G V N P L R L T G Q Q N N V  
UniRef90\_V4HLH3 L T E H S H G T E N V M A M A N L A A V T G N L I G K P G A G V S P F R L T G Q Q N N V  
UniRef90\_U4WKQ1 V T Q N V A G S H T S A A T A N L L L V T G N F G R H G A G A Y P L R L T G H N N V  
UniRef90\_Q1PVH1 Y N H S T Q A V F K N N T L H N L W L L T N N F C K P G A G P L S I T G E C N A  
UniRef90\_S3XCY1 M Q R A Q F G E Q A D W T L M V L A S F I G Q V I G A L P G G G F G F S M H Y T G G  
UniRef90\_J1F997 M Q R Q Q Y G E Q R H W M V T L A A M L G Q I G L P G G G G F  
UniRef90\_J7GFLO M Q R H V I N G G A N V R A I D A F V A M T G N I G V E G G G A R Y G H L Q T W G  
UniRef90\_UPI0004637B2F L V H H I N G F N Y R A I F S L I A L T G N Y D V E G G N  
UniRef90\_K1JLM1 P Q R R M N G E T Q S T S I A M L P I L L G Q I G L P G T N S G A R E T G D S Y G  
UniRef90\_W2EVJ1 I Q R H E G G G A A M R A I A C I P G V T G D W R Y P G G G V A Y S T S A H  
UniRef90\_D3P985 L I N Q R T R G G W A N N L I H N L H L I T G N I C K P G A D S F S L T L T G Q Q P N A  
UniRef90\_I5CB57 V T E H S Q G A T A V M A I A N L A M L T G N I G R E G V G V N P L R L T G Q Q N N V  
UniRef90\_H2ILU8 I T Q F V S G T S V V A L A D L A L I C G H I I G K P G T G I N P L R L T G Q Q N N V  
UniRef90\_G8MBD1 V N Q S S A G T D K V N A I I N C H L L T G R I I G K P G M G P F S F T G Q Q P N A  
UniRef90\_UPI0003638AF0 I N Q S T S G T D K C N A I I N C H L A G G K I G L P G A G P F S I T G Q Q P N A  
UniRef90\_Q1H3E9 V T E H S Q G G S T M V M G I A N L A M A T G N I G R E G V G V N P L R M L T G Q Q N N V  
UniRef90\_B1VG96 P Q R H A N G E N Q A R A I F L L A A V I G Q I G I K G G G T G A R E S S A  
UniRef90\_UPI000464E7E5 L N Q S T H G A D H T T A L C N L H L A T G K I C R R G S G P F S L T G Q Q P N A  
UniRef90\_B4UF83 L N Q R T R G V W A N N L I H N L H L L T G K I G L P G S T P L S L T L T G Q Q P N A  
UniRef90\_J3HR96 V T E H S Q G S T T V M A I A N L A M A T G N I G R K P G V G V N P L R L T G Q Q N N V  
UniRef90\_V9GRT5 V Q R A H R G E Q P Y W M V I A L S A M L G Q V G L P G G G F S F G H G S M N G  
UniRef90\_A3Y7M7 V N Q S A T Q G V E T K S N A I I N C H L A T G R L I G K E G M G P F S I T G Q Q P N A  
UniRef90\_E2DDK5 V T Q F Y Q G V E T V R S L T S L A L M T G N L I G K P N V G V N P L R L T G Q Q N N V  
UniRef90\_D8NXH5 V E R H A G G G Q T V R A I A C L P A L I G A W K H V G G G L L Q L P I W A  
UniRef90\_UPI0003B7638D V T R Y S G N D T Q F V R L I A L L H A L M G N W E Q P G G L Y K T I P  
UniRef90\_H2IKR0 V N Q S S Q G S D K V N S I I N C H L A T G K I I G K E G A G P F S V I T G Q Q P N A  
UniRef90\_UPI000377F981 I N Q S T H G S D G V V I G I N N L N L V T G N I G K P G G T S L S I T G Q Q C N A  
UniRef90\_H3MSD4 M Q R H V I N G G V N V R A I D A F V A M T G N I G L E G G G V R Y G H L Q T W G  
UniRef90\_A0NWM4 V N Q S V V G T D K V N A L V N T H L A T G R I I G K P G M G P F S V I T G Q Q P N A  
UniRef90\_C9ZEF5 T E Q H S K G T D T V H G V I N L C L A L G K A G R P Y S G Y G C L T G Q Q G N G  
UniRef90\_UPI00036B3676 I N Q S S S G V D K C N A I I N L H L A T G Q I G R E G G C G P F S I T G Q Q P N A  
UniRef90\_W6K756 V T E H S Q G T T T V L A M A N L A M A T G N I G R N G V G V N P L R L T G Q Q N N V  
UniRef90\_U5WKD8 L N Q S T H G T W N T N A L C N L H L A T G A I C K P G N G P F S L T L T G Q Q P N A  
UniRef90\_E2DDD9 L C Q F G Q A V D V V K G L A N L A I M T G N L I G R P S T G I G P V L T L T G Q Q P N A  
UniRef90\_G7GKB6 L N Q S T H G T W N T N A L I N L H L A T G A I C R T R T G S G P F S L T L T G Q Q P N A  
UniRef90\_H5EIS3 P Q R Q A N G E L T A R A I A M L P I L T G N V I G L S G G N S G A R  
UniRef90\_V2TGN5 V N Q S S Q G V N K A N S I I N C H L L T G K I I G K L G A A P F S M T G Q Q P N A  
UniRef90\_UPI0003B6EEF3 P Q R H S L I G V N T R A I G L M T L L T K N I G L T G G S S A R E G A S V  
UniRef90\_A9BV39 V T E H A Q G S T M V M G I A N L A M A T G N V I G R E G V G V N P L R L T G Q Q N N V  
UniRef90\_W0EAR7 T A Y T S N D Y Q L R A I M I V N M M I G N F E V P G G Y Y H N K G A G V L K  
UniRef90\_UPI00047847A5 V T Q H G G S D T S T A I S N L L L I T G N Y M K Q G A G A Y P L R L T G H N N V  
UniRef90\_B8FMR6 L E Y T K S G V Q N I R A V M A L W A V A G Q L D V E G G R N F L H H D A  
UniRef90\_S0G6R9 Y R C H Q N E I Y M R R S I L M L N A L M G S V I E A K G G L F F K K G P G A E G  
UniRef90\_A6C7E0 V N Q S Y Q G V R T A Q A L I N L A L M T G N I G R P G T G A N S I T G Q Q C N A  
UniRef90\_B8FN53 I T E H T C G K N N V M S V A N L Q M L L G N M G M E C G G V N P L R L T G Q Q N N V

UniRef90\_H5TY13 MGGREMGYMGPGGLPGQRRAVITIS EADRDFCE DTWEVPRGTLT  
UniRef90\_A6QAE2 MGTREFPGYRNYASDADRQAFADTVNVVVDLVPDKRGGYAY  
UniRef90\_F4C4C8 MGGREVGGLPASHRLDNNRPSQHRNE DLQVFWGGKTI DSKPGLT A  
UniRef90\_B7KFD9 MGGREAGGLS HRLPGYR SVKNEQFVGLKPGQIQISPNPGRD V  
UniRef90\_UPI000367F899 MGGHL L L P GYRLVKNPQHRAEVE DFWGLKRQGISATPGMTA  
UniRef90\_Q28P87 QGS CD MGS F PHELPGYR HAVVRA L F E S K W G V E L D P E P G L R L  
UniRef90\_A0L7Z7 NQF PQNRT H L I K N P G A D K A L L G R D R F P V Y S A Y R G E S H A I A L  
UniRef90\_UPI0003A238A9 MGGRENMLAJAHMDLIERADH R D V V Q T F W D S P A M A D K G G L K A  
UniRef90\_H0Q599 QGS CD MGS F PHELPGYR HAVVRA L F E G A W G V T L W D A E S P G L R L  
UniRef90\_Q1H4J9 MGGREMGMYPGGLPGYR SVLSAQDRAF I E N L W H T S A G R T  
UniRef90\_Q5E0S7 G V P S T G F S G P G G F P R N V D Q G H E P K W N N N D Y N G Y S S T I P V A  
UniRef90\_UPI00035DA91C MGGREMGMYPGGLPGYR SVLVDA L W G I P Q G S L R T G A G R G T  
UniRef90\_UPI000364F353 MGGREVGGLAN H M D F A P E D I A R V G R F W H A P N M V S Q P G L K A  
UniRef90\_N8VGH7 MGGRENMLAJAHLDLLENPGHQQLVQNFWQSPYTA K Q A G L K A  
UniRef90\_G4I4N0 MGGREMGMYPGGLPGYR SVAVAEAVWE L P P G T I R A D T N R G T  
UniRef90\_T0CYU9 QGAGDFGCA PAFYPGYR SASADKDV E Q V W G T P L P T N P G L N N  
UniRef90\_V5XB16 MGGREMGMYPGGLPGYR VVLSAE D R A F C E E Q W G L E P G T I R  
UniRef90\_C0D9I5 P A G F K T R F R N H R E P E G A P R I G A G R F P L W D A K F N E F Q T M D L  
UniRef90\_S6HY14 QGS CD MGS F PHELPGYR HAVVRA L F E A A W N V K I D D Q P G L R L  
UniRef90\_E1IBP3 WDS A A V G H T H E C P P S P R I N M N R L I G A A L M G E  
UniRef90\_A3X6S4 MGGRENMLANHL D L E N P D H R A S V Q A F W Q S P T L C T Q P G L K A  
UniRef90\_D3CV15 MGGREMGMYPGGLPGYR SVQVEADRA F V E R Q W P D V D G G Q T  
UniRef90\_A5L6B2 MGGRENTLJAHFEFGDPQS H R T V S E F W Q T D N L T T Y A G L K A  
UniRef90\_M9RC01 QGACDMGSPHE L P G Y R H V T R E V F E K I W G T I D P E P G L R L  
UniRef90\_M2WS27 MGGREMGMYPGGLPGYR T V L V D A A W N V P R G T L R T D P V G G T  
UniRef90\_UPI0003B58D8A QGATDFGSA P N L L P G Y Q A V E D E E F E Q G W N T K L S S E V G M T N  
UniRef90\_A6VQ09 QGACDMGAM P D K F P G Y Q P V I R E K F E K A W G V K L P A H A G T H A  
UniRef90\_F5Z4X7 MGGRENMLAJAHCD I E N P E H R E N V K A F W Q S P A M P E C G G L K A  
UniRef90\_J7QGF2 QGS CD MGS F PHELPGYR H A A R Q A F E K D W G V S L D P E P G L R L  
UniRef90\_A1UI27 MGGREMGMYPGGLPGYR S L L S A E D R A F V E Q R W R T D A G P G A  
UniRef90\_J3DA01 MGGREMGMYPGGLPGYR S M L V E A D R A F I E D L W G I P R D R L T  
UniRef90\_R1IN79 QGS CD MGS F PHELPGYR HAVVRA L F E G E W G V P I D D E P G L R L  
UniRef90\_F2NH78 QGACDMGAL N V L P G Y Q K V I D P A A R F W G V K D L P D K N G L M M  
UniRef90\_UPI00046877AE MGGRENMLANHL D I E N A A H R D T V Q T F W N S P A I C D H A G L K A  
UniRef90\_F6DCH0 MGGRENQLAJAHMD F N D P A A I D R V E R F W Q A E N M A Q Q N G L K A  
UniRef90\_B8EJ49 QGACDMGSPHE F A G Y R H V A R D V E S L W G V E L E H E P G L R L  
UniRef90\_G0A8X3 QGACDMGSPHE L P G Y R H I A R A Q F E Q A W G V T L A A E P G L R I  
UniRef90\_E1YDM7 R I P T C K S R Q I E T P D F E K S I A K G K F P V I Y S L F C G N E P H A G L L  
UniRef90\_UPI000478AC1B G A L K G N S H F L R N A K S L Q R P D L L E N K Q T R T I N M N Q D L G S A  
UniRef90\_W1N7Q6 MGGRENQLAJAHMDYDS P G A L E R V I T R F W S T P S L T P D P G Y K A  
UniRef90\_Q05V08 MGGREAGGLAH L L P G Y R I V T V E Q A W G F P Q G Q L A A T P G L G A  
UniRef90\_R7G3H8 P C N E Y G K V K R L D T I E A I G E K D F P A W F D L P C E E A Q C T R I  
UniRef90\_E1R268 W N M L P D P R C G K I S V P Q T G D V V S V P V Y L W P D A I  
UniRef90\_N9QLX1 MGGRENMLAJASHLDLDNSQHQQQLVQDFWQSPVITRQPGLKA  
UniRef90\_I3ZTG5 QGAA Y M G A L S E F L P G Y V P L T D E R F R K W G V E D L P E T E R G L Y L  
UniRef90\_F7UWG8 T Y R F E A D V P A E N P V I T V A I P V F L W T D A V L C G P E M S A D D  
UniRef90\_E2EA43 QGACDMGAL I D T L P G Y Q V V R T K F A K A W G R I N S R E K G Y P L  
UniRef90\_F4GQD1 QGS CD MGS F PHELPGYR HAVVRA L F E R E W G V T L Q S E P G L R L  
UniRef90\_V4HLR3 QGGGDMG P L P D N F P G Y Q D I G K D E V R A K F E W N C D I S P E Y G  
UniRef90\_U4WKQ1 QGACDMGSL P N W L P G Y D D E A R Q K F E K A Y D V K I S N K P G Y T N  
UniRef90\_Q1PVH1 L G C R W V P G M R M V A N P Q H R Q E V A D F W G I P T E K L H P V P G R S I  
UniRef90\_S3XC Y1 G Q A S S G V M L P G G L A Q G K N K V R V K I P A S R V S D A L L N P G K K I  
UniRef90\_J1F997  
UniRef90\_J7GFLO  
UniRef90\_UPI0004637B2F Y N Y H A M T Q T P P V G S V G M E G A S G P V I G E F V S D S G E K R K Y S D T  
UniRef90\_K1JLM1 V S P C N E F G K V K R Y D G E E A I G E K D F P I W F D L P C Q E A Q C T R I  
UniRef90\_W2EVJ1 L E A G L P T G A N P V K V G M P V I P L R A D T R E D L P H P V R T L T  
UniRef90\_D3P985 C G G V R E T G S L A H L L P G T K P V K N K K W R T H V E K V W G L K P G T I T  
UniRef90\_I5CB57 QGS CD MGS F PHELPGYR H I V R A D F E A A W G V T L D P E P G L R L  
UniRef90\_H2ILU8 QGACDMG C L A N V I P G Y Q S V E D S I T Q L R F S D Y W C D V A S T L  
UniRef90\_G8MBD1 MGGRENMLAJAHNLEFGDLS H G D I V Q T F W S S P K I A Q R A G L K A  
UniRef90\_UPI0003638AF0 MGGRENQLAJAHMDY H M P G A I D R V T R F W S T P S L P E G P G Y K A  
UniRef90\_Q1H3E9 QGACDMGSPHE F P G Y R H V S D D T F E A A W G R P L D K E P G L R L  
UniRef90\_B1VG96 N L G M A S P F N T Q H E N P I E T A I P V F G W T E A V E R G E M T A T R D  
UniRef90\_UPI000464E7E5 MGGREMGMYPGGLPGYR Q D G R D R A F V I E T L W G L A P G T L Q A L  
UniRef90\_B4UF83 C G G V R D G G A L S H L L P Y G R L T A N E K H R A E M E K L W N V P G T I  
UniRef90\_J3HR96 QGS CD MGS F PHELPGYR H V T R D I F D K L W G V K I Q D E P G L R L  
UniRef90\_V9GRT5 V G N P R I D T P G P A M P V G K N P A G L A I P V A R I C D M L L I Q P G Q P Y  
UniRef90\_A3Y7M7 MGGRENQLAJAHMDY F A T P G A I D L V K D F W Q A P N M A K E N G L K A  
UniRef90\_E2DDK5 QGACDMGAL P D T Y P G Y Q V R E K F A K A W G V P S L P A H T G Y R I  
UniRef90\_D8NXH5 F P V N W G G L M R P E L Q P P E M R V I N S W R L G P A L L G D L P  
UniRef90\_UPI0003B7638D F K I E N K P H M V H F E K H G G E R A D G A G T E F P L A P K N L G L A N K  
UniRef90\_H2IKR0 MGGRE V N T L T A H M F H P G D D I R V E D F W Q T D T L A K K P G L K A  
UniRef90\_UPI000377F981 MGTREWS S C S G L P K P E E R E E I A K F W G V D P E F F P K Q R G L T E  
UniRef90\_H3MSD4 F N Y A L M S H K P P A G S I G I K G A G G P V I G E F V S D S A E E S E Y S D R  
UniRef90\_A0NWM4 MGGRENMLAJASHMVL E N A E H R R I V Q D F W K S P A I A D R P G L K A  
UniRef90\_C9ZEF5 QGGRE H G Q K A D Q L P G Y R S A H V A R V W G V A P E E L P G P G T S A Y  
UniRef90\_UPI00036B3676 MGGRE V G G L A S Q L A H M D F T A D D L D R V G R F W N S N R V Q A Q A  
UniRef90\_W6K756 QGS CD MGS F PHE F S G Y R S V A D D A F E A V W K K P L S D Q P G Y R I  
UniRef90\_U5WKD8 MGGREMGMYPGGLPGYR SVLSA A D R E F V E Q Q W R T D V I S A G V  
UniRef90\_E2DDD9 QGACDMGAL P N V F P G Y Q P E I R E K F E K A W G V K L S D Q P G T L  
UniRef90\_G7GKB6 MGGREMGMYPGGLPGYR A V L S D D D R A F C E N A W H T R L G G T  
UniRef90\_H5EIS3 E S T Y T I T I E R L P V L D N P V K T S I S C F S W T D A I D H G P Q M T A I  
UniRef90\_V2TGN5 MGGRENMLAJAHLDLDNL S Q Q I T L V Q E F W Q S P N L A R R A G L K A  
UniRef90\_UPI0003B6EEF3 G L S F P G W S T A F P G N D V K H Q I S N Y T W Y D H T V M T G R T W G V R G  
UniRef90\_A9BV39 QGS CD MGS F PHELPGYR H I V R A E F E G A W G V A L L S P E P G L R L  
UniRef90\_W0EAR7 K F P D Q A A Y G K S L G G I A Q P S F P T P S K A G Q I L P A Y D G A V G K L  
UniRef90\_UPI00047847A5 QGASDFGSM P D R F P G Y Q F V V R H R F E K S W D T E L S V I P G L N N  
UniRef90\_B8FMR6 F I P L N K S I L K E T P G F D K S I G K G K F P V I A E Y C G G E P H A I L L  
UniRef90\_S0G6R9 M G S P A R K L T E T F P E I T V P R F D K V T P D F P L P D P A H G A P Q I L  
UniRef90\_A6C7E0 M G S R L F S N T N F L G G H D F L N A E H R D K V P T E R I P D Q N S W P Y  
UniRef90\_B8FN53 QGACDMGAL P N V Y C G Y P K A K E K F E K V W G V E G L S D K V I G L M I

UniRef90\_H5TY13 UniRef90\_A6QAE2 UniRef90\_F4C4C8 UniRef90\_B7KFD9 UniRef90\_UPI000367F899 UniRef90\_Q28P87 UniRef90\_A0L7Z7 UniRef90\_UPI0003A238A9 UniRef90\_H0Q599 UniRef90\_Q1H4J9 UniRef90\_Q5E0S7 UniRef90\_UPI00035DA91C UniRef90\_UPI000364F353 UniRef90\_N8VGH7 UniRef90\_G4I4N0 UniRef90\_T0CYU9 UniRef90\_V5XB16 UniRef90\_C0D9I5 UniRef90\_S6HY14 UniRef90\_E1IBP3 UniRef90\_A3X6S4 UniRef90\_D3CV15 UniRef90\_A5L6B2 UniRef90\_M9RC01 UniRef90\_M2WS27 UniRef90\_UPI0003B58D8A UniRef90\_A6VQ09 UniRef90\_F5Z4X7 UniRef90\_J7QGf2 UniRef90\_A1UI27 UniRef90\_J3DA01 UniRef90\_R1IN79 UniRef90\_F2NH78 UniRef90\_UPI00046877AE UniRef90\_F6DCH0 UniRef90\_B8EJ49 UniRef90\_G0A8X3 UniRef90\_E1YDM7 UniRef90\_UPI000478AC1B UniRef90\_W1N7Q6 UniRef90\_Q05V08 UniRef90\_R7G3H8 UniRef90\_E1R268 UniRef90\_N9QLX1 UniRef90\_I3ZTG5 UniRef90\_F7UWG8 UniRef90\_E2EA43 UniRef90\_F4GQD1 UniRef90\_V4HLR3 UniRef90\_U4WKQ1 UniRef90\_Q1PVH1 UniRef90\_S3XCy1 UniRef90\_J1F997 UniRef90\_J7GFLO UniRef90\_UPI0004637B2F UniRef90\_K1JLM1 UniRef90\_W2EVJ1 UniRef90\_D3P985 UniRef90\_I5CB57 UniRef90\_H2ILU8 UniRef90\_G8MBD1 UniRef90\_UPI0003638AF0 UniRef90\_Q1H3E9 UniRef90\_B1VG96 UniRef90\_UPI000464E7E5 UniRef90\_B4UF83 UniRef90\_J3HR96 UniRef90\_V9GRT5 UniRef90\_A3Y7M7 UniRef90\_E2DDK5 UniRef90\_D8NXH5 UniRef90\_UPI0003B7638D UniRef90\_H2IKR0 UniRef90\_UPI000377F981 UniRef90\_H3MSD4 UniRef90\_A0NWM4 UniRef90\_C9ZEF5 UniRef90\_UPI00036B3676 UniRef90\_W6K756 UniRef90\_U5WKD8 UniRef90\_E2DDD9 UniRef90\_G7GKB6 UniRef90\_H5EIS3 UniRef90\_V2TGN5 UniRef90\_UPI0003B6EEF3 UniRef90\_A9BV39 UniRef90\_W0EAR7 UniRef90\_UPI00047847A5 UniRef90\_B8FMR6 UniRef90\_S0G6R9 UniRef90\_A6C7E0 UniRef90\_B8FN53

LD MFD QMA D GK I K A C W I T C T N P I A S V S N R S R V T D A L Q R C  
P Q I I D A I N R G E T I K A L W V V A T N P L V S Y P D Q N G L R E A L L K K L D  
T Q M F D A L N E R G E T L K G A I W I S C A T N P L I S L P D V R K A R E Q S A L L K K N A K  
W S M I T G L E R G E V G L L W I A A T N P A V S L P D L V R T R K S A S A L L Q S P  
T D M I L G L E N G T V G L L W I A A T N P A V S M P D L K R T Q A A L L M R S P  
P N M L D S A V I G T F K G L Y C Q G E D L I Q S D P D T H H V A A G L L A A M E  
Q S V L Q G V T Y K V R D L V L G G S L I T S W P D L P E L W K R T L A N A L E  
V D L F Q A I E D G K V K A V W V M A T N P I V S L P D A D Q A R R A L L A K C  
P N M F E A A L D G S F R G L Y C E G E D I A Q S D P N T H H V I A A L L R A M E  
I A M F E Q M A A G K I K A C W I T C T N P V A S V A N R Q N V I A G L R A R A E  
R W I D C L L E P D F K M M V I S G N N P W H H Q Q D R N R M K K A F Q K L Q  
V E M F E R M A A G D I K A C W I T C T N P V A S V A N R N R V I A G L S A A E  
V E L F E A V A D G T I K A I W I M G T N P A V S L P N A N R R V I A G L S R C E  
V D L F Q A V E S G K I K A I W I M A T N P V V S L P D A D Q V K H A L L E T C E  
I D M F E Q L A E G D I K A C W I T C T N P V A T V P N R T T V I T G L E T A E  
H Q M V D A L H E G R L K A M Y L I G E D M A V V D S N A N Y V I Q Q A F E K L D  
S E M F E Q A A A G E I K A C W I T C T N P V V S V P N R A T V I A A L E A A E  
M R Q I E E E T Y P V Y K A V F A L G L N A K L F P E T D R L L E T K A K K L D  
P N M F D A A I S G K F K G M Y V V Q G E D I A Q S D P N T H H V I E K A L K S L D  
V D L F Q A C A A D G K I K A L W V I T C T N P A V S L P N A D G V I A A I A A V P  
I E M F Q R M A A G Q I K A C W I T C T N P V A S V G N R S T V I A D G L S A A E  
I D L F D A M N E G K I K A V W I M A T N P V V S L P D S E K I K T A L L E K C P  
P N M L D A A V D G T F K G I Y I Q G E D L I Q S D P D T K H V I Q A G L A A M E  
V D M F S R M A D G D I K A C W I T C T N P V A T V A N R R T V I A G L E K A D  
H E M V D A M H E G R L R S L Y L K G E E M A L V D S N I N Y V V Q Q G F E K L D  
T D I F S A K A V K G E V K G L Y I Y G E D P V V T D P D T N H V V K A L K K L D  
V D L F S A M D A G Q I K F V W I M G T N P V V S M P Y R E Q V E S A L L K C D  
P N M F D A A T E G T F K G L Y V Q G E D L I Q S D P D T R T H V S R A L L A N M D  
V D M F E R L A A G E I K A C W I T C T N P V A T M P N R R Q T I I A G L Q A A E  
V A M F E D M S A G R I K A C W I T C T N P V A S G P N R R Q V I D G L E Q A A E  
P N M F D A A T A G R F K G M Y V Q G E D I A Q S D P N T Q H V I E A A L T S L E  
P Q M M D G L P T G K V K I F Y V F G E N L A N T E P D I H H V I E K A L A N V P  
V D L F D A C A A G K I K A L W V M S T N P A V S M P D A N R V I A Q A I L E K A  
P N M L D A A V D G T F R G L Y I Q G E D I V Q S D P D T H H V I A S A L L K A M D  
P N M F D A A M D G S F R M G L Y C E G E D I V Q S D P N T Q H V I T A A L S N M E  
P K A I I D S D P Y K I K A M L V Y G A S L I T S W P D P G L W K K A L L Q E L D  
L L Q L E Q E K P V I R S L F V Y S S N P A I V A P E G N K V R N G L R E R E D  
V E L F E A I E R G E P I Q A L W I M A T N P L V S L P D A N R V R T A I E R C P  
W Q Q V I E A M E R G D L D L W W V A A T N P L V S M P E L D R V K A A M Q N C A  
A D Y I L K E E P Y S P L K A V V G F G L N H R M W P E P E H F K K A L K A L D  
L E G R A G G F P S S P S F I Y C V G G N Y L G Q G S D L N K S R R A F D K A E  
V D L F Q A V E S G K I K A I W I M A T N P I V S L P D A D Q V K R A L L E K C E  
T E L W E A I E N G D V R A L Y L V I G E N P A V S E A N F A R V R E A L R K L D  
G V I G A E R L K T G K F L W N Y A G N T L I N Q H R T H E I L Q D E T K C E  
S E L P H N A I S G K V K A F Y V M G E D P M Q T E P D L S V V R Q G F E A L D  
P N M F D A A I S G S F K A L Y C Q G E D L I Q S D P N T Q H V I A A A L S M E  
Y Y T T Q M F L N D V R G M Y I I G E N A A L S E P G V N H A G E V L E D L D  
I Q M L E A V E A G T L K A M Y L I G E D M A W V D S N S N H V I Q E T L S K L D  
M D I V S G L H S G D V R A L W V I A A N P A A S L P N T K T W I L D G L S K A E  
K F K G E E M V Y P N I K I F Y N V G C N T L G H Q P D S N T L I K A L R T L D

A Q S I L D A N D P P V I R M L W V A C K N P F A Q M D F D R P N K M K K A F D G A L L E  
A D Y I L L E E E P P V I K A V I F A M G L N H R M W P P Q P N E L Q R A L P I T K V E D  
A V R G A P A L R H N I K F I W N T Q S N T L I N Q H Q G G I N Q L R P I T K V E D  
M T R L A D G L D E S V K C L W V Y A A N P L G S T S D Q N R I R A A L S R D D  
D K P G F H T N D P I K A M L T S T T N P A Q S L P N L N K Y I K G M K D A  
P N M F D A A V A G S F R G L Y C E G E D V V Q S D P D T Q H V I A E A L M A M E  
G L M T K A A L A G H F R A Q L L F G E D P V V T D P D Q N H V R K A Y K S L D  
V D L F Q A I E A G R V K A V W I M G T N P V V S L P D G D R V R K R A L L E K C E  
V D L F D A I E R G E I R A I W I M A T N P G V S L P D A N R M R R I L E A C P  
P N M L D F A I H G S F K A L Y C E G E D I A Q S D P N T Q H V I T Q A L S M E  
G V I Q G K D K L D V P I K M I W S Y G G N A N T N Q H G D L N R T R R E D S K A E  
P E T S M P M G T G E I K A V W I T C T N P V A S V P N R Q T V I D G L R R A E  
M D L F Q A L E Q G D T F K A L Y V M T T N P A Q S N V D R Y R K A L E A R K A F  
P N M L D A A V D G T F K G I Y I Q G E D L I Q S D P D T K H V I A A G L E A M E  
Q F Q G E T H T Y P D I H L V H W A G G N P F H H H Q Q L N R L V E G W Q K P D  
V D L F K Q M E E G K V V V Y I M S T N P M V S L P D T A Q V R S A L L E A C D  
S E L P H R V A H G E V Y A Y I M G E D P L Q T D A E L S A Q V R K A F E L E  
L M E A I A E Q S T D L K A M F I Y G C N P M S M V S D Q S N K I E Q G A R E D L  
I D M F D A I H R G E I K A V W I M A T N P V V S L P D S D K I K Q A L E N C P  
T D I F P A I E A G D I K G L W L V A T N P M T S M P N T D R L R K T L E K L E  
A L N I N Q A S E P P V R L L W V A S K S P F A Q D F D R N K M E A K A F A K L E  
V E L F E A V R E G R I K A L W I M A T S P V D S L P D A D G V E A E A L K T C P  
E M L D T A G T P D G V R A L L V M G S N P V V S A P N A G H V I E R R L R A L D  
V D L F R A I E N G Q V K A V W I M G T N P L V S L P D A D R V R A G L A R S C P  
P N M L D A A V D G R F K A M F I Q G E D I A Q S D P N T Q H V I A A L S L D  
V D M F S R M A A G D I K A C W I M C T N P V A T V A N R K T V L A G L E K A E  
T V V P H H V L H K Q I H A Y Y I M G E D P A Q S D P D L A E V R E S L E K A D  
I D M F S K M A A G D I K A C W I T C T N P V A S V A N R K T V I E G L E R A E  
R D G V R G K D K L D V P I K F I W N N T L V N Q H S D I N K T H Q D E S K C E  
V D L F Q A I E Q G K I K A I W I M A T N P V V S L P D A G Q V K R A L L E K C C E  
F D S P D E A L K N P L K F I W N Y G N C M L N Q H G D I N K M Y K R D D T K C E  
P N M F E A A L A G S F M G L Y C E G E D I V Q S D P N T Q H V I T A A L S A M E  
V E S I L T E D P Y P I K A W L V H R F N P Y I T I T E S E R V L E A F K K L D  
H E M V D A I H E G K L E V L Y L K G E D M G I V D S N I N Y V I Q S A F K K L D  
P K A I I D G T P Y K I R G L F I Q G A S I L T A W P D P K V W Q K A M E E L D  
P Y A I L N E D P Y P I K A L I N Y R L E T L M S I A D T N N T K K A L D K L D  
H K I I E G I L A G K I K G L W V I C T N P A H S W I N Q G Q V R D I L D R L D  
P Q M M D G L V D K K V R A F Y I F G E N L A N T E P D I H K V I E H E L A S A E

UniRef90\_H5TY13 L V V V Q D V F E N E T P Y A D V I A L P A T L W T E S D G V M I C Y T N S S E R R  
UniRef90\_A6QAE2 L L V V V Q D A F M S N D T A Q I A D V V F A A A T W S E K E G G M T N S S E R R  
UniRef90\_F4C4C8 F V V V Y Q E I L S S K E T T L A Y A D V I L P A A A W S E K E G T M T N S S E R R  
UniRef90\_B7KFD9 L T V V Y Q D Y Y P T E T T A Y A H L L P A A A Q W S E K T G T M T N S S E R R  
UniRef90\_UPI000367F899 F T I Y Q D Y Y P T E T A Y A H M L L P A A Q W S E K T G V M T N S S E R R  
UniRef90\_Q28P87 C V I V H D L F L N E T A N Y A H V F L P A G S T F L E K D G T F T N A E R  
UniRef90\_A0L7Z7 F L V V I D R Y H T A D S A Y A D I V L P A T T L Y E C R S F M R Y G  
UniRef90\_UPI0003A238A9 L V V A S D M Q N T D T N A Y A H V L L P A L G W G E K D G T V T N S E R R  
UniRef90\_H0Q599 C V V V Q D I F L N E T A K Y A H V F L P G A S F L E K N G T F T N A E R  
UniRef90\_Q1H4J9 L V I T Q D A Y L N E T N R Y A D I V L P G A L W A E A E G V M I  
UniRef90\_Q5E0S7 T V V T I D F T W T A T C R F S D I V L P A C T Q W E R N D I D Q Y G S Y S A R R  
UniRef90\_UPI00035DA91C L V V T Q D V F E T E T N A Y A D V V L P A T L W A E S D G V M V  
UniRef90\_UPI000364F353 T V I V S D D C H Q T D T A E Y A N I V L P A L G W G E K D G T V T N S E R R  
UniRef90\_N8VGH7 F V V V S D C Q D T D T T Q Y A D V V L P A L G W G E K D G T V T N S E R R  
UniRef90\_G4I4N0 L V I T Q D Y R D T A T N R Y A D V V L P A A L W A E S D A V M V  
UniRef90\_T0CYU9 F F I V Q D V F F S K T A S F A N V L P A S P S L E K E G T F T N T E R R  
UniRef90\_V5XB16 L V I T Q D Y I D T A T N R Y A D I V L P A A L W S E S D A V M V  
UniRef90\_C0D9I5 F I V D V D L F M N M S A K Y A D I V L P A C T S V I E R S E L K C Y R F G G  
UniRef90\_S6HY14 C L I V Q D I F L N E T A K F A H V L L P G S T F L E K D G T F T N G E R R  
UniRef90\_E1IBP3 F T V V H E Q F M S D T A R Y A D I V L P A T T Q L E Q V D L H R P Y G H R R  
UniRef90\_A3X6S4 F V A V S D I M R T D T G D L A D V L L P A T G W G E K D G T V T N S E R R  
UniRef90\_D3CV15 L V V V Q D Y A D T E T A D H A D V L L P A A M W G E A D G I M I  
UniRef90\_A5L6B2 F V V V S D C I D T E T T R L A D V V L P A Q G W S E K S G T V T N S E R R  
UniRef90\_M9RC01 C V I V H D L F L N E T A N Y A H V F L P A G S T F L E K D G T F T N A E R  
UniRef90\_M2WS27 L V I S Q D A Y L N E T N D Y A D I V L P A A L W T E A D G V M V  
UniRef90\_UPI0003B58D8A F F V V Q D I F L S E T A K F A D V V L P A S P S L E K D G T F V  
UniRef90\_A6VQ09 F L V V S Q E L F M T E T A L L A D V V L P G R S Y A E K D G T F T N T E R R  
UniRef90\_F5Z4X7 M V V V S D I V Q N D T L A F A D I V L P A T G W S E K D G T V T N S E R R  
UniRef90\_J7QGf2 I V I V Q D L F L V E T A N Y A H V F L P G A T F L E K D G T F T N A E R R  
UniRef90\_A1UI27 L V I T Q D Y R D T A T N R Y A D I V L P A T L W A E S D Q V M V  
UniRef90\_J3DA01 L V I T Q D A Y L N E T N R Y A D I V L P G A L W A E A E G V M I  
UniRef90\_R1IN79 C L I V Q D I F L N E T A K F A H V F L P G A S F L E K D G T F T N A E R R  
UniRef90\_F2NH78 F M V C H D I F P T E T T R E A D V I F P A A A W C E D D G T F A S  
UniRef90\_UPI00046877AE F V A V S D I M R T D T G D L A D V L L P A T G W S E K D G T V T N S D R R  
UniRef90\_F6DCH0 C V V V S D V A D T D T T R C A N I V L L P A A A W G E K D G T V T N S D R R  
UniRef90\_B8EJ49 C C V I V Q D I F L N E T A N Y A H V F L P G S T F L E K D G T F T N A E R  
UniRef90\_G0A8X3 C C I V V Q D I F L N E T A K Y A H V F L P G S S F L E K D G T F T N A E R  
UniRef90\_E1YDM7 F L V T M D L Q L T A D A Y A D I V L P A T T A F E Q E S Y C Y Y G S S L R  
UniRef90\_UPI000478AC1B F T V V H D L F L T E T A K Y A D I V L P A T S A F E N L D F Y T S Y W H H  
UniRef90\_W1N7Q6 L V I V S E C M L D D L V A D I V L P A S G W S E K D G T V T N S E R R  
UniRef90\_Q05V08 L V V V S E Y A D S E T S H Y A H L L L P A S Q W S E K A G A M T N S E R  
UniRef90\_R7G3H8 F Y V N V D L F F S D S S K M A D L V L P A A S S F E R D V L N G R G G  
UniRef90\_E1R268 F S V V H D Y F L T E T A S W A D I V L P A T T F L E R E D I C F V P G N  
UniRef90\_N9QLX1 F V V V S D I C L T D T M Q Y A D V L L P A L G W G E K D G T V T N S E R R  
UniRef90\_I3ZTG5 L L V V Q D I F M T A R T A R Y A H Y V L P A S A F C E K S G S Y M N S E R A  
UniRef90\_F7UWG8 F I V V I D T F M T A S A R Y A D I V L P D L M P V I E Q P S L I A N D W A G D A  
UniRef90\_E2EA43 L V I V Q D I F M T Q T A A M A D V I F P A T S W G E H E G V Y T S A D R G  
UniRef90\_F4GQD1 C I V V H D I F L N E T A K Y A H V F L P G S S F L E K D G T F T N A E R  
UniRef90\_V4HLH3 F L V V Q D L F V N E T A E Y A D V V L P A C S F V E K T G T F T N T D R R  
UniRef90\_U4WKQ1 F F V V Q D I F F T R T A Q F A D V I L P A A P S L E K D G T F T N T E R R  
UniRef90\_Q1PVH1 M L V V Q D F H P T E T T K L A D V V L P A A Q W C E K A G T F L S  
UniRef90\_S3XCY1 T V I V H E P W W T P T A K M A D I V L P S T T T L E R D D I S Y G G S Y S Q D  
UniRef90\_J1F997  
UniRef90\_UPI0004637B2F M V V C V D Q F F N E T V Q R H A D I V L P V T T T F E H W S A S S S Y W H Y  
UniRef90\_K1JLM1 F Y V N V E D Q F F W S E S S R M A D I V L P A C T T T F E R E E V K T L R G G  
UniRef90\_W2EVJ1 T I V C V D T Q M T P S A M F A D Y V L P D V C H Q E R S I D L D S Y A V G D Q N  
UniRef90\_D3P985 F L V V L D I F P T D T T Q L A D V V L P A S T M Q T E H L D V H A G Y G H M  
UniRef90\_I5CB57 C I V V Q D I F L N E T A R Y A H V F L P G S S F L E K D G T F T N A E R  
UniRef90\_H2ILU8 L L V V A E L I T M T E T A K L A D V V L P A A S F A E K S G T F T N C E R  
UniRef90\_G8MBD1 L V V A S D I L V E K D T N A V A D V V L P A L G W G E K D G T V T N S E R  
UniRef90\_UPI0003638AF0 L V I V S D C M A N D I L Q Y A D I V L P A S S W S E K D G T V T N S E R  
UniRef90\_Q1H3E9 C V I V Q D L F L N E T A M Y A H V F L P G C S F L E K N G T F T N A E R  
UniRef90\_B1VG96 L I V V S D I L Q M S V S A R Y A D V V L P D A S T A E Q E D V I Q Q G S A G N M  
UniRef90\_UPI000464E7E5 C V I T Q D A F M D E T N H Y A D I V L L P G A L W A E G D G V M I  
UniRef90\_B4UF83 L V V T E A F H P L T R T S E L A D V V L P A A L W A E K E G V Y G C T E R  
UniRef90\_J3HR96 C V V V H D I F L N E T A N Y A H V F L P G S T F L E K D G T F T N A E R  
UniRef90\_V9GRT5 T V I V Q D I W W T P A A K M A D I V L P V T S S L I E R N D I G G S S R D R  
UniRef90\_A3Y7M7 L V I V S D I Q A T D T S K F A D V I L P A T G W S E K D G T V T N S E R  
UniRef90\_E2DDK5 L V I V Q D I F M T K T A A A D V I L P S T S W G E H E G V Y T A A D R  
UniRef90\_D8NXH5 F T V V S E H F M T D T A R Y A D I V L P A T M Q L I E Q K D I M F S W G H L  
UniRef90\_UPI0003B7638D L T V T C D I Y M T D M A L Y S D V I L P E S T Y L E R Y D P A I T Q A R K S G  
UniRef90\_H2IKR0 L V V V S D C E N T A T T Y A D I V L P A Q G W S E K S G T V T N S E R  
UniRef90\_UPI000377F981 C L V V Q D C Y D A E S N Q Y A H I F L P A A T W A E K E G V F T N T E R  
UniRef90\_H3MSD4 M V V V D Q F F N E T V Q H A D I V L P V T T T F E Q W D V C S S Y W H Y  
UniRef90\_A0NWM4 F V V V S E V T R A D T V P Y A N V L L P A A A W G E K D G T V T N S E R  
UniRef90\_C9ZEF5 L L V V A D V V R S E T A E L A D V V L P S A Q W A E E T G T L T N L E G  
UniRef90\_UPI00036B3676 L V I V S D M R D T D T T Q A A H I L L P A Q G W G E K N G T V T N S E R  
UniRef90\_W6K756 L L I V Q D L F L N E T A N H A H V F L P G T S F L E K D G T F T N A E R  
UniRef90\_U5WKD8 L V I T Q D S F A E T E T N E Y A T V L L P A A L W T E S E G V M V N S E R  
UniRef90\_E2DDD9 F V V M Q D I Y M N K T G Y A D V I L P S T G W C E H D G V Y S C C D R G  
UniRef90\_G7GKB6 L V I M Q D A F E V K T G G Y A D V V L P A S L W S E S T G V F I N S E R  
UniRef90\_H5EIS3 M I V T I E N F M T S S A K Y A D I L L P D L M T V I E Q E D I I P N D Y A G N M  
UniRef90\_V2TGN5 C V V V S D I Q N T D T T V Y A D V V L P A L G W G E K D G T V T N S E R  
UniRef90\_UPI0003B6EEF3 C I V N I L D N Y F T P S A M V A D Y L L P D C T N W E Q N D V S G N S G N T A  
UniRef90\_A9BV39 C V V V Q D I F L N E T A K Y A H V F L P G A S F L E K D G T F T N A E R  
UniRef90\_W0EAR7 L L V T Q D V Y M T D T A Y F S D V V L P E C T Y L E R Y E P L F D M S G L T P  
UniRef90\_UPI00047847A5 F F V V Q D I F F S K T C E Y A D V V L P A S P S L E K D G T F V N T E R  
UniRef90\_B8FMR6 F L V C I D L Q M T K D A F A D I V L P A S T A F E Q E S Y C Y Y G N A  
UniRef90\_S0G6R9 L I V T I D I L Y N S D T A W F S D V I L P E S T Y L E R T D S V I Q Q L N G L K P  
UniRef90\_A6C7E0 F L V V Q D M Y H N E T A K F A D V I L P A A G W G E K E G T F I N A E R  
UniRef90\_B8FN53 F L V V Q D I F Q N E T T R F A H V L L P G C A W S E N N G T F T N S E R

UniRef90\_H5TY13 N L T L F P Q A V A P P G D A L P D W Q L T C R L A T E M G Y G E G F S F G S A  
UniRef90\_A6QAE2 R C N Y A K K A I E P P L G E T K S D L E D I A V L L S R T I N K M E P G S C T F P  
UniRef90\_F4C4C8 R I T Y L S P K Q F N R P P G E A L K A D Q E I F C Y E F A K R R F G K Y F D L H S P R D E  
UniRef90\_B7KFD9 M V T L S P K Q F N R P P G E A L K A D Q E I F C Y E F A K R R L G F T K Q Q F F F E T S  
UniRef90\_UPI000367F899 V V T L S P A F R Q P P P G E A K P D W E I F A E V G R R L G F V K Q F F D F T C S  
UniRef90\_Q28P87 R L N R V R E K V M K P P K N G Y A D W E I T Q L L A K A Q R M G A D W H Y T H P S Q  
UniRef90\_A0L7Z7 M F A I R E K L V P P V G E A R N D F L I L A E L A Q R M G Y A G F D F P Q  
UniRef90\_UPI0003A238A9 R I S R Q R A F L P A P G E A L G D W K I I S L F A Q R M G Y A G F D F P D F D  
UniRef90\_H0Q599 R L S R V R K A M P P L A G K E D W E I T V D L A N A C E M G Y P M Q Y G H P S E  
UniRef90\_Q1H4J9 N M T L T Q Q A V P P P G D A M P D W Q I I J A S I A C E M G Y A E A F S Y A S  
UniRef90\_Q5E0S7 G L I A M H K L V D P P L Y Q S K S D F E I M T E L A T R R F G R H  
UniRef90\_UPI00035DA91C N L T L V P G V A D P P D W K L T A E V A C A M G F A D E F F S Y T E E  
UniRef90\_UPI000364F353 R I S R Q R A L L P P M G D A K P D W W A L C E V A K R M G F G D E F F S Y T E E  
UniRef90\_N8VGH7 R I S R Q H A F L D A P G E A K A D W W A I S Q V A Q K M G F T F D F N N S H D  
UniRef90\_G4I4N0 T L T L V S Q Q C V L P P A G Q S R P D W K L I C Q V A E A M G F G A H F F Y S S E  
UniRef90\_T0CYU9 R I Q R L Y Q Q V L P P L G Q S K P D W Q L I Q M V A E N R L G A N W N Y T S P E  
UniRef90\_V5XB16 N I T L L Q Q S V T P P L V G Q A R P D W E L I C G V A E Y L G F G D D F A Y K G S  
UniRef90\_C0D9I5 Y L V Y T K P A I E P P L Y E S K S D V D I L C E L A R V M D L D D D L L K G G Y  
UniRef90\_S6HY14 R I N R V R K A V M P P L A G A J A D W E V T L G L A K A L G Y E M N Y A H P S E  
UniRef90\_E1BP3 H L Q Y N H A A L A P P L G E A R S N W D T M R A L A Q T L G Y T E P W L H A S A  
UniRef90\_A3X6S4 R I S R Q R A F L P A P G M A R P D W K I T C D L A A R M G W A D A F D F A S A  
UniRef90\_D3CV15 N L T L T S A V V D P P P G A A L P D W Q L I A R V A A C E M G F A A A F T Y S T D  
UniRef90\_A5L6B2 R I S R Q R R V L P S P G E A K P D W W S L K E V A Q K M G F K E Q F D Y R H E  
UniRef90\_M9RC01 R I N R V R K V M A P P K N G Y G D W E V T M L L A N A M D S G W A T T H P A Q E  
UniRef90\_M2WS27 N L T L F P Q A L D P P L G N S K P D W E I L Q L V A N R M G A D W D Y S H P S E  
UniRef90\_UPI0003B58D8A R I Q R L Y K A L D P P L G N S K P D W E I L Q L V A N R M G A D W D Y S H P S E  
UniRef90\_A6VQ09 R V I S R Q R K A V T L P P G E A R K H D W Q I M C E D V A N K M G F Y S H P S E  
UniRef90\_F5Z4X7 R I S R Q R G I M P P P G E A K H D W Q I M C E D V A N K M G F Y S H P S E  
UniRef90\_J7QGf2 R I Q R V T K V M S P P K N G Y A D W E V T Q L L A N K L G L N W N Y A H A S E  
UniRef90\_A1U127 T L T L L Q Q A V P P P G E T R P D W Q L T C R I A A E E G F D F A Y T D S A Q D  
UniRef90\_J3DA01 N L T L M Q K A V E P P P G E T L P D W Q L I A R V A C E M G F A A A F T Y S T D  
UniRef90\_R1IN79 R I S P V R K V M A P P L C G K A D W E A T M D L A N A L G Y E M H Y K H P S E  
UniRef90\_F2NH78 R V N R V R K V K Q P P G Q A R P N W W I F K E L A K R L G Q E W A S N S A Q E  
UniRef90\_UPI00046877AE R I S R Q R A F L P A P G M A R P D W R I L I S D V A A A M G F G T A F D Y P A E  
UniRef90\_F6DCH0 T I S R Q R A F L S A P G Q A K P D W W W I C Q V A Q K M G F E Q A F N Y V S P  
UniRef90\_B8EJ49 R I S R Q R K V M S P K N G Y G D W E I T M L L S N A M G F K M S Y K H P S E  
UniRef90\_G0A8X3 R I S R V R K V M S P A K A G L S D W E V T L A L A K A L G Y E M P Y K H P S E  
UniRef90\_E1YDM7 Y I Q L R E K L I E P P L Y E A K P G Y E I L T E L A K R L G Y G H L Y P Q N Q K  
UniRef90\_UPI000478AC1B R I S R Q R G V I E P P F G E S K S N T E L F R L A K A F G F E E A F C F Y D S D  
UniRef90\_W1N7Q6 R I S R Q R G M L P P P G E A R H D W W I I S Q V A T H L G Y S E A F S Y A S T  
UniRef90\_Q05V08 R V T Y C P A Y R P R H G Q S R P D W E V F A E V G R R L G F E Q H F S Y D S A  
UniRef90\_R7G3H8 M F F L S E K A V I E P P V G E A K N D I E I M I G M L R A M Q L H D E A L E H G Y  
UniRef90\_E1R268 Y L F Y S A Q A V P P V G E A K N D Y E L F S L L A E R L G F A E E F T A G L S  
UniRef90\_N9QLX1 R I S R Q K A F L P A P G E A K A D W W A I S R V A K A L G F R G F D F N S H  
UniRef90\_I3ZTG5 R L Q W S H R V C Q P P L G E R S K P D W E L T A L G R A L G L P G F D Y R S V E  
UniRef90\_F7UWG8 G Y V L M N Q V L P A K G D R K T L Y W M L S R V A E R L G F A D E F T E G R S  
UniRef90\_E2EA43 F Q R F Y K A V E P K G D V K T D W E I T C L M S T A L G Y P M K Y N N T K E  
UniRef90\_F4GQD1 R V S R V R K V M E P K A G M A D W E A T C A L S N A L G Y P M H Y K H P S E  
UniRef90\_V4HLH3 R V Q M V K Q V M E P K G D S R P D W K I L Q D L A G R M G R E W E Y D S T A E  
UniRef90\_U4WVKQ1 R I Q R L Y Q A L P T W E D S K P D W W I I T Q L A N H L G A N W R Y T H P G D  
UniRef90\_Q1PVH1 R I E L A D K I I D P P G E A K P D C E I L W L V A R A M G F E K E F P Y S S P  
UniRef90\_S3XCY1 Y V Y A M K K V I E P L Y E S R N D Y D V F E E M A K I V G D R E W R F G K T  
UniRef90\_J1F997 W L T V N E R A I K P M Y E C K S D L E D I A V L L S R T I N K M E P G S C T F P  
UniRef90\_UPI0004637B2F M F A L N E R A V V E P P L G E S K N D I E I M E L A K R I L G L E D E V L S T S D Y  
UniRef90\_K1JLM1 Y L M L S D K A I D P P E W E S K Q P N W E I M R G L A K R R F G C E A A Y T E S G L D  
UniRef90\_W2EVJ1 Y L M W N E P A V E P P P G E C L S T T E T F R R L A K R M G L T E P S L Y Y D T D  
UniRef90\_D3P985 R S Q L T E K A V N P P P G E A K A D W I W I A A Q I A K R M G F E K L I P W N M D  
UniRef90\_I5CB57 R L S R V T Q V M P P P M G G Y A D W E V T V K L A N A L G L P M H Y K H A S E  
UniRef90\_H2ILU8 R V Q H I N P A M T P P L G E A M A D W Q W L Q A L A K K M G S D A L N W S N S E  
UniRef90\_G8MBD1 R I S R Q R A F L P A P G T A R A D W R I V C D V A R R M G F T G F P H E I F N  
UniRef90\_UPI0003638AF0 R I S R Q R G L L P P P G E A R H D W W I M T Q V A S R M G F Y T H P C E I F D  
UniRef90\_Q1H3E9 R L S P V R K V M T P P K N G Y E D W Q I T A M L S E A E R L G V P M P Y R H A S E  
UniRef90\_B1VG96 Y T L L A S K A I E P P H N T K P I Y E V C A E L A E R L G V G K P F R H A S E  
UniRef90\_UPI000464E7E5 T L T L T P K T V P A P G D A Q P D W H I T A S V A Q A M G Y A F A Y A S A A D  
UniRef90\_B4UF83 R Y Q L L E Q A V R P P A G E A R P D F A I L C D L A A R L G H G A L L P W K A P  
UniRef90\_J3HR96 R I N R V R K V M S P P L N G Y A D W E V T Q N L A K A M G L N W N Y T H P S Q  
UniRef90\_V9GRT5 Y V L A M H Q A I A P Q H Q A R H D F D I F A D L A D R L G Y R E T F T E G R D  
UniRef90\_A3Y7M7 C I S R Q R G L V P A P G E A R H D W Q A I C D E L A K A L G F A S G F H E I F A  
UniRef90\_E2DDK5 G F Q R F K A V E P K W D L K T D W Q I S E I A T R M G Y P M H Y N N T Q E  
UniRef90\_D8NXH5 Y L S Y N N P A I E P P L G E A V S N T E L F R R L A R A L D I D D P L F Y R S D  
UniRef90\_UPI0003B7638D Y L Q L R E R P A T E P V H D T M G G W E M A E K L C H A M G Y D N A F D E I F R  
UniRef90\_H2IKR0 R I S R Q R R L L A S P V G J A K P D W W I S Q V A Q R L G F K E A F D E I F R  
UniRef90\_UPI000377F981 R V N I T R Q V K A P Y A D S K S D L E I F N L L A K R F E Q G Q K I E F P E R N  
UniRef90\_H3MSD4 W L S V N E P A I K P L Y E C K S D P E I L S A I N K I E S G S C Y F P F F N  
UniRef90\_A0NWM4 R I S R Q R A F L E L P P G E A R P D W W Q L S E V A S R M G Y A E A F S F P F R  
UniRef90\_C9ZEF5 R V I L R R K A V E P P A R V R T D L Q I L S A L A R L G R T E G F P D P R L  
UniRef90\_UPI00036B3676 C I S R Q R A F L P P P G E A K P D W W I L C Q V A Q R L G F G E A F A Y I F R  
UniRef90\_W6K756 R L N R V R P V M P P R S G K H E W Q V L C D L A T A L G Q P A M A Y D T S A A  
UniRef90\_U5WKD8 T M T L F Q K A V E P P V G Q A L P D W Q I I A R I A C E M G Y S E S F S Y Q S D  
UniRef90\_E2DDD9 F Q K I R K T I E P T G D V K T D W E I I S L I S T A M G Y P M K Y N N T A E  
UniRef90\_G7GKB6 N L T L F E P V L G A P G E A L P D W Q L A A I A C E M G Y A D A F T Y A E  
UniRef90\_H5EIS3 G Y I F L Q P V T S E K F E R K P I Y W L S E V A K R L G P Y Q K F T E G R T  
UniRef90\_V2TGN5 R I S R Q R A F L A A P D Q T K A D W W A V C Q V A K N M G F T G F D F Q N S Y  
UniRef90\_UPI0003B6EEF3 S L V F Q N K A V E P P F E C I T I Y E M M S K I A K L G L E Q E Y T E G K T  
UniRef90\_A9BV39 R I S R V R K V M A P L A G Y A D W E V T Q L L A N A L G Y A M H Y T H P S E  
UniRef90\_W0EAR7 K F V L R Q P A V P L V G E S T K P Y W Q I Y K E I G E K M G L G D Y F G Y K D M  
UniRef90\_UPI00047847A5 R F Q R L Y K A L N P L G E S K P D W Q I T K E I A N R L D A E W H Y D H P G E  
UniRef90\_B8FMR6 I R Y R E K M I E P V G E A K P N H Q I L A E L A E R L G Y G D L Y A K D  
UniRef90\_S0G6R9 M M F L R E K A V E P R Y Q T L E S D P I L K R L G E R L G I G N Y F P Y E T M  
UniRef90\_A6C7E0 R I G R V K A V K R A P G Q A L S G F S I F K L I A Q Y W G C G E M F K N W K S  
UniRef90\_B8FN53 R V N R V R K A S E P P G Q S K P N W W I F K Q I A K R F G H E W E S N T G Q E

UniRef90\_H5TY13 E F E E I K R F W N P K T G W D R E T P L Q W P C P P D D D A D R H P I R Y L N 530 540 550 560  
UniRef90\_A6QAE2 V F E E I K R V S K G Q L C D Y S G M S Y E L I E E L G G I Q W P C N  
UniRef90\_F4C4C8 A V Y L E H A Q L T K G T N I C E M T S G L T Y D L L R S N E R G S I Q W P C N  
UniRef90\_B7KFD9 A E V H R E F V E Q L T R N R P C E M T S G M S Y E R L Q N E R P L Q W P C S  
UniRef90\_UPI000367F899 A E V F A E F V Q L T R D R P C D M T G L S H Q L L Q T Q G G P T Q W P Y P  
UniRef90\_Q28P87 I M D E I A E T P G F A N V N Y A M L E E R G S V Q W P C N  
UniRef90\_A0L7Z7 T E A A I L E R A L E G S G F T L E Q V Q A A G G V Q L E S Q  
UniRef90\_UPI0003A238A9 E H A R L S G F A E D I P R A F D M S G L A G L S G D A Y Q E L E P V Q W P A R  
UniRef90\_H0Q599 I M D E I A R L T P T F R G V S Y E L L D R L G S V Q W P C T  
UniRef90\_Q1H4J9 A A E V F E E I K R T S N P K T G Y D I R G V S H D R L R A T P Q W P C P  
UniRef90\_Q5E0S7  
UniRef90\_UPI00035DA91C V F E E L K Q A W N P A T G W D L R G V D Y A R W P A P A A D G P D R N P I R  
UniRef90\_UPI000364F353 R D I F A E H A A A E G T L R D F N I S A L K G I S R Q Q Y E Q L A P F Q W P G D  
UniRef90\_N8VGH7 I F L E H V R L S A E Y F R Y F N L Q G L S N L T A Q E Y D E L D P V Q W P V W  
UniRef90\_G4I4N0 E Q I F D E R R F A N P K T G Y D L R G L I T Y Q R L R E T P V Q W P C P  
UniRef90\_T0CYU9 I F E E A C A T T E L F A G A T Y E R L E G Y K S L Q W P V L P D G  
UniRef90\_V5XB16 A Q I F D E R R F A N P R T G Y D L R G V S Y D R W P C P A D P D D R H P I R  
UniRef90\_C0D9I5 E A C L D W I T E G C G L T M E D L K K S D V P V R V  
UniRef90\_S6HY14 I M D E I A E L T P T F S G V N Y E K L E Q Q G S I Q W P C N  
UniRef90\_E1IBP3 E E V I A E I L E A S R P H N P Q L T D I F T L D Q L Q R E G T V P L H F T  
UniRef90\_A3X6S4 V F A E Y V A L S G A T R R F G R D L D L S I F A D I D Y A N L L P T Q W P Q N  
UniRef90\_D3CV15 E E V F A E R A F H N P A T G Y D L R G V S Y E R L R A G P V Q W P A A  
UniRef90\_A5L6B2 E Y C E M T A L G N E T G K A R D L C G L T Q L D E K G Y G E L T P Q Q W P V M  
UniRef90\_M9RC01 I M D E I A A T T P S F A G V N Y E M L E T R G S V Q W P C N  
UniRef90\_M2WS27 E V F E E I T R F S N P R T G Y D L R G V T Y A R L Y E T P I Q W P C P D V T  
UniRef90\_UPI0003B58D8A I M A E A A S L C P F F E G V S Y E R L E G Y D S L V W P V T K E G Q D E P L L  
UniRef90\_A6VQ09 I F D E M A S V T P S F H G M S Y A R Q L D N E P S Q Q W P C T  
UniRef90\_F5Z4X7 E H A R L T A Y K N D G A R L L N L A P L T G K S Q A Q Y D A M A P V Q W P L T  
UniRef90\_J7QGf2 I M D E I A R L T P S F A G V S F K R L E E D G S V Q W P C N  
UniRef90\_A1UI27 I F D E I R F S N R T G F D L R G A T Y D R W P V P P D D G T D R H P I R  
UniRef90\_J3DA01 E V F E E I K R A W N P K T G Y D I R G A S Y P R L R D K P L Q W P C R N P I R  
UniRef90\_R1IN79 I M D E I A K L T P T F H G V S Y E K L D E L G S I Q W P C N  
UniRef90\_F2NH78 I W D E V S H L A P A L A G I K Y F R L E G D G V Q W P A P  
UniRef90\_UPI00046877AE V F A E Y I A L D A A A R P F G R D L D L S L F A D A D Y A K L I P Q Q W P R D  
UniRef90\_F6DCH0 E H V A L S A F E N D G R R D F D L S G L Q S L T E P E Y Q N L Q P I Q W P V T  
UniRef90\_B8EJ49 I M D E I A A L S T P S F A G V S Y A K L D E M G S I V Q W P C N  
UniRef90\_G0A8X3 I M D E I A A L S T P T F H G V S Y A K L E K L G S I Q W P C N  
UniRef90\_E1YDM7 E L L E Y I L S E S G F T V E D L M K A D R H V I R K P N T  
UniRef90\_UPI000478AC1B K D M I Q Q A I E N V D N P S I E E I S Y E Q L E K Q H F I K A K R K  
UniRef90\_W1N7Q6 E H A R L S G F E N D T R R L F D I S A L A E L D Q D G Y D A L E P I Q W P V S  
UniRef90\_Q05V08 A E V Y A E F S Q L T E G R V C D M S G L S H E L L S E S G P Q W P F P  
UniRef90\_R7G3H8 E K Y M E Y I L E P S G V T L E E L R A H P F E  
UniRef90\_E1R268 E A Q W I E K F L D E S V V D D Q K A F R D C G I W F E G  
UniRef90\_N9QLX1 E H A R L S A Y Q N S S L R Y F N L Q G L T H L G F A E Y Q N L A P I Q W P V W  
UniRef90\_I3ZTG5 E I T A E Y F K L F P E L E D R S V E E L K T G E G I F L P R K  
UniRef90\_F7UWG8 E E D W R R A L Y E E A R Q S D D D L P Y D E M L E M G V Y R R S N P  
UniRef90\_E2EA43 I W D E L R E L C P I Y Y G A T Y E K M E N L G Y I Q W P C P  
UniRef90\_F4GQD1 I M D E I A R L T P T F E G V S F K K I D E L G G S V Q W P C N  
UniRef90\_V4HLH3 I M E E V N S L T P I Y G G V T H D R I E E E G G L Q W P C W  
UniRef90\_U4WKQ1 I M G E I A S L S P L F S G V S Y E R L A N W N S L T W P V L  
UniRef90\_Q1PVH1 E D V F G E F K Q I T S G R L C D M N G V T Y E R L R G N T G I Q L P C P  
UniRef90\_S3XCY1 K D E R I K D F Y E R S D C P N Y M E F D E F W E K G Y V H F P S E  
UniRef90\_J1F997  
UniRef90\_J7GFLO Q D V D Q K K W L D L E F N D G L A K Q F G I S S W D D L L K G P V K A K M P S  
UniRef90\_UPI0004637B2F E S Y M D Y I L K P S G L T L Q D L R E H P P G M P A W D E F R R T G I Y K Y R M E  
UniRef90\_K1JLM1 L E G W V R R L Y A E A R K N L P G M P A W D E F R R T G I Y K Y R M E  
UniRef90\_W2EVJ1 L E I A E Q L L G P A G I S L E E I R K Q G W V R L G V A  
UniRef90\_D3P985 D S M K A N E M Y I T V T K D T D H S L W G A T Y D R L K K E K A G I Q W P C P  
UniRef90\_I5CB57 I M D E I A S L T P T F R G V S F E K I E R L G S V Q W P C N  
UniRef90\_H2ILU8 E F D E M A A L T P A Y Q G M S Y A K L D K N Y G L Q W P C N  
UniRef90\_G8MBD1 E H A R L S S Y R N D A S R A F N M G G L A G M S R A Q Y D A L K P V Q W P L L  
UniRef90\_UPI0003638AF0 E H A R L S G F E N E G A R I F D I S G L V I G L D R E A Y D A L A P I Q W P V T  
UniRef90\_Q1H3E9 I L D E I A R L T P T F H G V S F K K L E E M G S I L Q W P C N  
UniRef90\_B1VG96 Q E Q W V K H T I A E S A R E I P E L P S Y E K L K E M G V W K R  
UniRef90\_UPI000464E7E5 V F D E I R R S T N P T T G Y D L R G A D H A R L Q S G P V Q W P C P P S A S  
UniRef90\_B4UF83 A E A W D E I L T L S K G T A Y D F T G M S H G L L W P L P A E G H P G T K R R  
UniRef90\_J3HR96 V M D E I A L T T P S F A G V T Y D L L E K E G S V Q W P C N  
UniRef90\_V9GRT5 E M A W I R H I Y Q E C G A A Q R S H D V E W P D F E T F W Q Q G Y V D L P A P  
UniRef90\_A3Y7M7 E H A A L S C F K N N G K R D F D I G H F S Q I N Q Q E Y D A L L P V Q W P V P  
UniRef90\_E2DDK5 I W D E L R G L C P D F Y G A T Y E K M G E L G Y I Q W P C R  
UniRef90\_D8NXH5 D E L I E M S M D W C N P V M A G I T L S E L R Q K G Y M R L A M P  
UniRef90\_UPI0003B7638D Y N R E M F K A A G T T E E Y M K E H G V Y V G A  
UniRef90\_H2IKR0 E A Q L T A L G N A R Q R D L N L A G L V E I T D S E Y N S L T P Q Q W P V E  
UniRef90\_UPI000377F981 P S E V F E A M K Q L S K G R L C D I L S G M S H D L I E Q K R G I Q W P Y T  
UniRef90\_H3MSD4 P K K W L D E E F N D E L A T Q F G I R N W D L  
UniRef90\_A0NWM4 E H A G L S G Y C N D N R D F D I S A Y Q D V P D A G F D A M T P F Q W P Q S  
UniRef90\_C9ZEF5 V F D E L R A A S A G G R A D Y A G I S Y E R I S A E N G V F W P C P  
UniRef90\_UPI00036B3676 E H A A L S G F E N A G T R A F D I S G L A Q L C N E Q W D A L R S I Q W P V N  
UniRef90\_W6K756 I M D E I A R L T P T F A G V S F E K L D Q R G S L Q W P C T  
UniRef90\_U5WKD8 V F D E I T R F S N P A T G Y D L R G I S Y D R L R Q T P L Q W P C P  
UniRef90\_E2DDD9 I W N E V S L C P G F A G A T L E K I E K N L S I Q W P C R  
UniRef90\_G7GKB6 I F D E I R Q F H N P R T G Y D L R G V T Y E R L R A T P M Q W P C P P S D  
UniRef90\_H5EIS3 Q E Q W L Q H L I Y A K M L A K D P A L P S Y D E L K K W V S I S V K I P M A  
UniRef90\_V2TGN5 E I H F K Q R E Y T E Y F R Y L N L E G L T T L T L A D Y N A Q L Q P I Q W P V I  
UniRef90\_UPI0003B6EEF3 Q D E W L E Y L F N K G L E S Y G D Q G V G L D T Y E K A H A L L V K K Y D A  
UniRef90\_A9BV39 I M A E I A L T P S F A G V N Y D K I D R L G S V Q W P C N  
UniRef90\_W0EAR7 E D Y L T Q T L A P T G I T L D Q M K E K G V W T P S G M K A  
UniRef90\_UPI00047847A5 I M D E A A S L T P T F A G V S Y D R L E G Y D S L Q W P V A  
UniRef90\_B8FMR6 P K T L L G S V L L E G S G Y S M D D L L S A E N Y I K K P G K  
UniRef90\_S0G6R9 D E L V D W Q L E G T G F T R A D F K E K G F V S Y G K  
UniRef90\_A6C7E0 P E D V F Q L M K Q L T K G Q P C D F S I E N Y T A V D E Q G G I Q W P F P  
UniRef90\_B8FN53 I W D N E V S A F S P N F F G I R Y N R I E G D G L Q W P C T

UniRef90\_H5TY13 D G R S Q T K V V R A D G T T P E F V F P T P S G R A I F H A R P C L P P A E M  
UniRef90\_A6QAE2 D K A P K G T K R L Y S E E M P C P T P D G T A N L L P V D W V P L S E I  
UniRef90\_F4C4C8 N Y T E G Q Q S T P K R L F T D L K F Y T N N K R A K L Y A A S T S L G S E K  
UniRef90\_B7KFD9 W F K N K A G Q P P S K R R L Y T H L K F N T P D G R A R F A A F H S K G L A E P  
UniRef90\_UPI000367F899 Q Q P P C F R Q R T G K R L Y T S R R F H T P D G R A R F A A Y H S Q G L A E P  
UniRef90\_Q28P87 D A A P D G S P L M H I D G F V R G K G R F I V T E Y I A T E E R  
UniRef90\_A0L7Z7 M M Q Y K K W E K G R L R E D G K P G F A T P S G K F E I A S S L L V E H G Y D  
UniRef90\_UPI0003A238A9 R D A A G V I H S E A R L F A D R R F A H G D G K A R F I A T A T R A P A N A  
UniRef90\_H0Q599 D A A P E G T P L M H I D A F V R G K G R F M P T E Y I P T E E K  
UniRef90\_Q1H4J9 P D D P Q D R H P I R Y E D G E R P R F A T E S G K G V F F A R P W L P P A E M  
UniRef90\_Q5E0S7  
UniRef90\_UPI00035DA91C Y L N D G V S Q T L T V R E D G S R P F P T P S G R A R F Y A R P H L P P A E L  
UniRef90\_UPI000364F353 S D K G L T E T T G T P R L F A D G Q F F T P N R K A R L L P I T P T L P Q A S  
UniRef90\_N8VGH7 D K H Q D A K S V T R L F A Q G Q F S H A D G K A K F I A T T A I D P V N L  
UniRef90\_G4I4N0 P D D E Q D R H P I R Y L N D G R L R F A T P S G R G T F H A R P H L D A R E L  
UniRef90\_T0CYU9 T D T P H L Y L D E F A L E G G K A R L W P V D W  
UniRef90\_V5XB16 Y V N D G V S Q T L H V D A D G H R P F P T P S R R A Q F L A R P H M D P H E L  
UniRef90\_C0D9I5 P S A V W P V K P G G C L K N G F P T P T G K F E F Y S T E I A K Y G L D  
UniRef90\_S6HY14 E E F P L G T P T M H V K D  
UniRef90\_E1IBP3 E E N F T P F G D L H F P T P S G K V E L L C A A M L E H G V D  
UniRef90\_A3X6S4 D K R F F A D G G F F H P D G K A K M L P  
UniRef90\_D3CV15 P G S A D R N P I R Y R N D G V S Q P F P T P T G R A M F H P R P H L P P A E L  
UniRef90\_A5L6B2 E Y Q P E I I E Q R M F T D G E F F T E L G K A Q F I A V I E H D K P I A D  
UniRef90\_M9RC01 E K F P N G A P I M H V D G F A R G K G Q F I T E Y V A T D E K  
UniRef90\_M2WS27 T D R H P I R Y L L V R E D G S V P R F P T P S G R A M F A R P H M P P A E M  
UniRef90\_UPI0003B58D8A Y E S R F Q F P N G K A R F Y P V H W T E P  
UniRef90\_A6VQ09 D N Y H A G T A I M H V G K M V R G L G L F Y P T E Y R P A K E L  
UniRef90\_F5Z4X7 I N S D K T L S A V R P F H N K V F S T P T G K A N F V A  
UniRef90\_J7QGf2 E N S P H G M P I M H I D G F A R G K G K F V I T E Y V P T E E K  
UniRef90\_A1UI27 Y L N D G V S Q D L H R V I E A D S G H R P F P T P S R R A V I F Y A R P H V D A A E L  
UniRef90\_J3DA01 Y L N N G V S Q L T R V I E A D G S Q P F A T E R G K G I F L A R P H M A P A E M  
UniRef90\_R1IN79 D E A P L G T P T M H I G G F V K G K  
UniRef90\_F2NH78 N L J E H P G T C Y L H K D G C F T C G Q G V F T P V D W T P P A E V  
UniRef90\_UPI00046877AE N A R F F A D G K F Y H A D G K A R M V P V T A P A L D H A  
UniRef90\_F6DCH0 A D Y P N G L K R L F E D G Q F F T P N R R A K F I A I T P Q L P K E S  
UniRef90\_B8EJ49 A A A P E G T P V M H  
UniRef90\_G0A8X3 D A A P D G T P I M H I D E F V R G K G K F I N T Q Y I A T D E K  
UniRef90\_E1YDM7 R M E Y K K W E K G L L R S D G K P G F E T P S G K F E I K S T V L I E K Y G Y S  
UniRef90\_UPI000478AC1B I V T N E V L P T P S G K I E L F S K K M E D G F E  
UniRef90\_W1N7Q6 V D S P R G T A R L F E D G R F A T A D G R A R L W P I T P R Q P H Q T  
UniRef90\_Q05V08 R G S E P S Q G A K R L Y S D H Q F P T P S G K A R F S T D L P Q G L A E P  
UniRef90\_R7G3H8 G V K G R V I T P P A F K R Y E K E G F H T P S G K V E F V S Q I L E R H G Y S  
UniRef90\_E1R268 K E H R R R T L A G F F A D P E G K K I E I V S Q A Y E A A G G P  
UniRef90\_N9QLX1 D K Q E V H Q V G Q L F S Q G Q F S H A D G K A R L V P T V A A D P V H A  
UniRef90\_I3ZTG5 R L H T W E F A T P D G R A R L A V E R I S P W I E  
UniRef90\_F7UWG8 D G H H I A F A D F R A D P E G H P L D T P S G K I E I Y S E K I K G E V I S  
UniRef90\_E2EA43 T L D H P G T Q Y L F A G S K F N R P G G K G Q L Y A C D W R P P L E L  
UniRef90\_F4GQD1 A A A P D G T P T M H V D E F V R G K  
UniRef90\_V4HLH3 D E D H P G T E R L Y E D E F D T D D G K A H L Q A V G F S E P A E T  
UniRef90\_U4WVKQ1 P D G T D E P L L Y I H R F N F P D G K A R L  
UniRef90\_Q1PVH1 D V N H P G T P R L F T D R Y F P R A D G R A A L L P R E Y L P P K E T  
UniRef90\_S3XCY1 D A Y K Y V R H S D F R K D P V N N R L R T E T G K I Q I Y S D K F A S Y K L D  
UniRef90\_J1F997  
UniRef90\_UPI0004637B2F S A A W H D R K F K T P S G K Y E F L S A R C E E N G H K  
UniRef90\_K1JLM1 G M K G K V L I P P R I Q T Y R E E P F H T K S G K I E L Y S L A L D K Y G Y E  
UniRef90\_W2EVJ1 G D S G I V M E D F R R D P D K H P L E T P S G R I E I Y S E R L A E I A  
UniRef90\_D3P985 D P F V P F T E G F P T P S G R L E F V S E R A G A A G L P  
UniRef90\_I5CB57 Y P G H P G T Y K R M F E H E E F K K F K K G E G K A N I W L R P Y K G P A E V  
UniRef90\_H2ILU8 E E T P E A G L E T M H I G K F V R G K G R F L I T K Y V P S D E K  
UniRef90\_G8MBD1 D D A P E G T A V L H E K E F P L G R A R L T P V K Y I P I D E S  
UniRef90\_UPI0003638AF0 A A A P Q G T A R L F T D G C F A T P D G L A R L I P V R P R G P  
UniRef90\_Q1H3E9 E E H P N G T P I M H V D E F V R G K  
UniRef90\_B1VG96 A G E S V I P L K E F R E D P V A N P L E T P S G L I E I Y S E E L A K L  
UniRef90\_UPI000464E7E5 T D R H P I R Y Q P L K R D P D G T V F P T P T G K A R F H T R S Y R A P A E H  
UniRef90\_B4UF83 F V K G E D P L V P A D A P D R I R F Y G R P D A R A V I W L R P Q Q P A E V  
UniRef90\_J3HR96 E K A P L G T P I M H I N G F A R G K G K F I R T E Y V A T D E R  
UniRef90\_V9GRT5 A K A F V F F D S F R E D P Q A N P L Q T P S G K I E L F S E K I A S Y Q Y N  
UniRef90\_A3Y7M7 K G R P E G T K R M L T D G R F Y T P N K A N F I S I T P Q K P V L K  
UniRef90\_E2DDK5 D V A E S D Q G T S F L Y D G K F D R A N G L G E F F T C D W A P I D K  
UniRef90\_D8NXH5 A P A D W A P H R E G N F P T A S G K C E F K S I A A G  
UniRef90\_UPI0003B7638D T G D P P A F N G E D P T F R T P S G S A E L Y S N I M E N F G Y D  
UniRef90\_H2IKR0 H Q Q H Q V V N Q R M F A D Q R F F T E N H R A N F I A V K H T A P Q A S  
UniRef90\_UPI000377F981 E D A K R G E K G A Q R L Y T E P R S F R Y K D G R A K L I P L P F I N D N E V  
UniRef90\_H3MSD4 L A G P H K A K M P S T A A W Y D R K F K T P S G K Y E F K S E R C V A N G H T  
UniRef90\_A0NWM4 A L A Q S A E T R F F A E G G F Y T E T G K G R F V P V V F K A P  
UniRef90\_C9ZEF5 A P G H R G T P R L F L D S F A T P D G R A R M V P V H H R P T A E T  
UniRef90\_UPI00036B3676 A A N P Q G T P R L F T D N T F L H A D G K A R L I A V V P R L P A N L  
UniRef90\_W6K756 D D S P E G T P I M H Q D R F V N G  
UniRef90\_U5WKD8 P D S S G R N P I R Y R N D G V S Q A F P T A S G R A V F F A R P H L L P D E M  
UniRef90\_E2DDD9 D K S D S D L G T V L H K G G K F A N P D G K A K F A T D W R P Q E L  
UniRef90\_G7GKB6 E R P D P T A G G A R N P I R Y L N A F A T A N R R A Q Q F A R P H V D P Q E M  
UniRef90\_H5EIS3 I L L S P T K H F V T T P R Q I H L K R L P V R L K F I P A G W R K L P V P  
UniRef90\_V2TGN5 T N I S Q S I Q Q L Y G T S Q N F S H K N G R A K F I A T A V I D P V N Q  
UniRef90\_UPI0003B6EEF3 S A T P S V A Y K S F V E D P Q N N S V S T P S G K F E I F S K R L Y N L S H Q  
UniRef90\_A9BV39 D S T E E A G T S I M H R D R F V R G  
UniRef90\_W0EAR7 F Y V R A N D P K A S L D N K V L E N K S K K I E I F S E E C E E A A K Q  
UniRef90\_UPI00047847A5 A D G T D P L L L E N K E F P L P E G K A R L W P V E W T K P  
UniRef90\_B8FMR6 P M E Y K K W E K G L L R K D G K P G F E T P S G K F E I K S T V L I E K H G Y D  
UniRef90\_S0G6R9 S Q I F W D R N D H F F K T P S G K I E F K S S L L E D A G F S  
UniRef90\_A6C7E0 D S E S Q P P E S Q R R L F A D G H F F H E N G R A R F I F S E S P S K M P E P  
UniRef90\_B8FN53 D E C H P G T S F L H K E G N F T C G L G N F Q S V I E W T P P A E V

UniRef90\_H5TY13 P D D E F P  
 UniRef90\_A6QAE2 Q C K G L P F  
 UniRef90\_F4C4C8 P D D D Y P F  
 UniRef90\_B7KFD9 P D E N Y P  
 UniRef90\_UPI000367F899 P D P D Y P F  
 UniRef90\_Q28P87 T G P R F P  
 UniRef90\_A0L7Z7 A L P V Y T E P Q E  
 UniRef90\_UPI0003A238A9 V C E D Y P  
 UniRef90\_HOQ599 V T K R Y P  
 UniRef90\_Q1H4J9 P D H D F P F  
 UniRef90\_Q5E0S7  
 UniRef90\_UPI00035DA91C P D E D Y P F  
 UniRef90\_UPI000364F353 L S E E Y P  
 UniRef90\_N8VGH7 V S S E Y P  
 UniRef90\_G4I4N0 P D G D Y P F  
 UniRef90\_T0CYU9  
 UniRef90\_V5XB16 P D D D Y P M  
 UniRef90\_C0D9I5 P L P G Y R D S L E  
 UniRef90\_S6HY14  
 UniRef90\_E1IBP3 P L P D Y  
 UniRef90\_A3X6S4  
 UniRef90\_D3CV15 S R R R L P V P A E  
 UniRef90\_A5L6B2 T S V E F P  
 UniRef90\_M9RC01 T G P R F P  
 UniRef90\_M2WS27 P D D D Y P F  
 UniRef90\_UPI0003B58D8A  
 UniRef90\_A6VQ09 P D K D Y P  
 UniRef90\_F5Z4X7  
 UniRef90\_J7QGF2 V G P R F P  
 UniRef90\_A1UI27 P D G D F P F  
 UniRef90\_J3DA01 P D E A F P F  
 UniRef90\_R1IN79  
 UniRef90\_F2NH78 P D A E Y P F  
 UniRef90\_UPI00046877AE G L  
 UniRef90\_F6DCH0 P S N D Y P F  
 UniRef90\_B8EJ49  
 UniRef90\_G0A8X3 V T Q K Y P  
 UniRef90\_E1YDM7 G I P K Y E E S L E  
 UniRef90\_UPI000478AC1B P L P S F P L Y E E  
 UniRef90\_W1N7Q6 L S S E Y P  
 UniRef90\_Q05V08 P C D T Y P  
 UniRef90\_R7G3H8 G L P E Y R D F R E  
 UniRef90\_E1R268 L W P V A H L P E P P  
 UniRef90\_N9QLX1 I S A E Y P  
 UniRef90\_I3ZTG5 P D G E F P F  
 UniRef90\_F7UWG8 A L P E Y A T Y F E P  
 UniRef90\_E2EA43 T D E E Y P  
 UniRef90\_F4GQD1  
 UniRef90\_V4HLH3 P D D E Y P F  
 UniRef90\_U4WKQ1  
 UniRef90\_Q1PVH1 I N E L Y P F  
 UniRef90\_S3XCY1 D F K G H P L W Q E P  
 UniRef90\_J1F997  
 UniRef90\_J7GFL0 A L P E Y  
 UniRef90\_UPI0004637B2F P L P V Y  
 UniRef90\_K1JLM1  
 UniRef90\_W2EVJ1 R V A G Y T P  
 UniRef90\_D3P985 P D A E Y P F Y L  
 UniRef90\_I5CB57 V T R K Y P  
 UniRef90\_H2ILU8 T D S D F P  
 UniRef90\_G8MBD1 P D E D H P  
 UniRef90\_UPI0003638AF0  
 UniRef90\_Q1H3E9  
 UniRef90\_B1VG96  
 UniRef90\_UPI000464E7E5 L D A E F  
 UniRef90\_B4UF83 T D A A Y P  
 UniRef90\_J3HR96 T G P R F P  
 UniRef90\_V9GRT5 D F A P H A E W K P P  
 UniRef90\_A3Y7M7 V T Q D F P  
 UniRef90\_E2DDK5 V T E E Y P M  
 UniRef90\_D8NXH5  
 UniRef90\_UPI0003B7638D P L P S Y  
 UniRef90\_H2IKR0 T T K V Y P  
 UniRef90\_UPI000377F981 P D E E Y P F W L  
 UniRef90\_H3MSD4 A L P E Y K E P A  
 UniRef90\_A0NWM4  
 UniRef90\_C9ZEF5 T D E R Y P L H L  
 UniRef90\_UPI00036B3676 P G A A Y P  
 UniRef90\_W6K756  
 UniRef90\_U5WKD8 P D G D Y P F  
 UniRef90\_E2DDD9 E N K Q Y P  
 UniRef90\_G7GKB6 P D D D Y P V  
 UniRef90\_H5EIS3  
 UniRef90\_V2TGN5 V N E H Y P  
 UniRef90\_UPI0003B6EEF3  
 UniRef90\_A9BV39  
 UniRef90\_W0EAR7 G L P Q Y V S H P Q P  
 UniRef90\_UPI00047847A5  
 UniRef90\_B8FMR6 G L P K Y E E S F E  
 UniRef90\_S0G6R9 S F P L Y E S P S K P A  
 UniRef90\_A6C7E0 P N E Q Y P F  
 UniRef90\_B8FN53 E C E E Y P



1 10 20 30 40  
UniRef90\_UPI00037AD92D K T V S T M C R F C P V D A V V K D G R L T S V K R K P V P G V T C P K N A  
UniRef90\_UPI00036D0DB9 R S V C P Y C G V G C I V M S V A D G K V G K I S G D K L H P S N F G R L C  
UniRef90\_E6W1W4 K G V C R F C G Y G C V I V G V K G E K V V I K G N P D A Q T S N F G R L C  
UniRef90\_B0G5V4 C S P G M H C G V I N A Y V K D G K V I K I E G M D G H P S N D G R L C  
UniRef90\_A8H719 S L C E M C S T C P I S A R V V N G K N V S I L G N K N A K A V C A R G G  
UniRef90\_R7PM17 G A C P H D C P T C A L L T T V D G V A T R V Q G N P A H A H T D G V R G K  
UniRef90\_J1ER37 T T C A Y C G V G C F E A H M L G D Q L V R M V P W K G G A N R G H S C  
UniRef90\_D5AQH0 I A K V S G D K L H P S N A G S R L C  
UniRef90\_K0F0B3 C T K T A C P Y C G V G C G V E V N Q L G I V G D K K H P A N Q G S R L C  
UniRef90\_E8LU42 H G G C P H D C P T C S M V Y E V E N G Q L T S V K G N K E H P M T R G G L C  
UniRef90\_F5SUW1 C E M C S T C P I S A R I V D G K N V F I S G N K E A K S F G G K V C  
UniRef90\_UPI000468B902 T C L L C S N G C A L D I G V K D G K L V G V R G R K E D V V N K G R L G  
UniRef90\_UPI000370CE88 C P D A C G L L V E V I D G K A V K V K G D P E H P F T K G T L C  
UniRef90\_J71VW5 C N A C S S K C G M I G L V K N G R L W K L T G H P D H P Y S K G K L C  
UniRef90\_V6T8C6 T H C P Y C A L Q C G M S D G A R V A P R D F P V N A G G L C  
UniRef90\_R4SJA2 T K T T C A Y C G V G C I E A K V N S Q G N L D I R G D K D H P A N Y G K L C  
UniRef90\_UPI0003B5D45E G G C P H D C P T C A M V F E V T D G K L I G V K G N P D H P M T R G G L C  
UniRef90\_UPI0004715479 T H C P Y C A L Q C G M R L D E T R V T P R D F P V N A G G L C  
UniRef90\_D9V717 T K S T C A Y C G V G C I E A S T I G A K G E L S L R G D Q S H P A N Y G N L C  
UniRef90\_UPI0003FF00A4 K S V C T H C S V G C V I A E V A G G V W V G Q E P G W D S P F N C A K G A  
UniRef90\_UPI000376129F C D M C F N K C G L I A R V E A N G V V K K L D P N P K F L K S R G M L C  
UniRef90\_UPI000375BBF2 A M D I A V K D N R I V G V R G R A V D R V N H G R L G  
UniRef90\_UPI00045E73C0 G G C P H D C P T C A M V F E V T D G K L I G V K G N P D H P M T R G G L C  
UniRef90\_N9Y1J9 T N Y C S I A C L D F Y V E N N K I V K V H P T E G H P I S N G F C  
UniRef90\_V4YKM4 G A C P H D C P T C S M V T S V Q N G L A I Q V R G N A A H A M T G G A L C  
UniRef90\_A0A031MDV5 C T T C P Y C G V G C G V I A T V G K A G E P N R I Q G D P E H P A N Y G R L C  
UniRef90\_UPI00039C283E C P D T C S W V V T V E D G A A V K L R G N P D Q P Y T R G A L C  
UniRef90\_M3IKM8 K S T C A Y C G V G C I K S R V I N N Q G Q L D I K G D E Q H P A N K G R L C  
UniRef90\_W9A0D5 S V C G M C T V C P I K V Q V I E G N P H V P A M C P R K A  
UniRef90\_UPI0003B35EAD G C G I V L E I G R D G R H V R V T G D T E H P A N R G R L C  
UniRef90\_UPI0003813F52 C P F C G V A C G L L W E E G R V R G D K K H P A T R G D L C  
UniRef90\_D3SMG9 C N L C S I G C G C E I A V K D E K I V G I R G N G H P I N R G R L G  
UniRef90\_UPI00037B5DF8 K S I C P F C G V G C I D L E V E E G K I V R V L P D R T H V V S K G H L C  
UniRef90\_F4B860 A T F C P L C V S R C G A T A T V D D G R L L A L R P L P G S P A I C V K G K  
UniRef90\_D8HQV3 C D V V V T I N D G K I T R V D P D Q D S P R G C K R G A  
UniRef90\_S2Y9A3 R T T C P Y C G V G C V L A S V D D A G Q V S V R G D D Q H P A N L G R L C  
UniRef90\_W1B2Q1 H G V C P K N C Y D T C R I L C T V V D G A A V Q I E G D S N P S P C V K G Q  
UniRef90\_F7UWH3 S V C P H C P T C A W K I E L S Q G R I Q R I M G D P L H P V T Q G V I C  
UniRef90\_T0IQN9 K S V C T H C S V G C V L A E V Q N G V W T G Q E P G F D S P F N C A K G A  
UniRef90\_W0EC05 C W H N C G G R C L K A Q V V D G V V K R V K T D D S P D N C V R G R  
UniRef90\_Q0G143 D N P T T H G R L C  
UniRef90\_UPI00036B751C C G M W L T V K D G K L I D V E G D E E H T I T Q G R L C  
UniRef90\_S6FBX6 D P K T L M L K P Y K G E P N R G K L C  
UniRef90\_UPI0003B751C K Y P S N N T L E A  
UniRef90\_I3REZ8 C N Y C A L D C L D F Y V E D E K I V R V L P T K G Y P V N D G F C C  
UniRef90\_F8BLG0 C E M C F W N C V I A H T R N G V V H K L E G N P F N P N N R G H L C  
UniRef90\_N9X2X7 A D K W V C R F C G V G C V E L G L K N G K P V A I R G V P Q S R T N F G F L C  
UniRef90\_UPI0003B740F1 E K H V A S S C E M C V F Y A H V V N G R I K K L N P N P K F F K S R A M L C  
UniRef90\_UPI0003B25C5 C S L R L T F R E N G R L L R V I E G D P R H P I T R N G F A C  
UniRef90\_UPI0004219AAC C N Y C A L D C L D F Y V E E N K I V K V V P T K D Y P V N N G F S C  
UniRef90\_B7A8B3 D K W V Y S T C G C G C Y I A V K D N R I V G I K G N V R Y P V N N G R L C  
UniRef90\_M1MFV0 F C G T G C G V L V G V S G D R A V A V K G D P N C S V N K G L C  
UniRef90\_G8N4D5 C N Y C S I A C F D F H V E N D F I E R V P A K N Y P V N K G F C C  
UniRef90\_M1PJT4 S K A A C R F C G T G C I M V A T K G G R V V A T H G D A K S P V N R G L N C  
UniRef90\_R9CBZ5 K T I C P Y C G V G C G I Q I T G G D E P S D V R G W G G A P V N E G R V C  
UniRef90\_G8PIR2 C V L C S N G C G V D I A V K D G T M V G V R G R A V D I V N H G R L G  
UniRef90\_MOLTB2 D K G V C R F C G T G C V L V G T K D G R V V A T Q G D P D A P V N R G L N C  
UniRef90\_UPI00035ECC72 T Y C E V C F W K C W V T T D E N G E I W K V E G H K A D P H C N G R L C  
UniRef90\_UPI00036B031B F C G T G C G V L V G T Q N G R V J A T Q G D P E A P V N K G L N C  
UniRef90\_UPI000403E64C A E Q T V C P Y C G V G C T I Q Y A G N G K A T G T A G P V N C P K G G  
UniRef90\_Q5V6J3 S C G F H V I E K N K V I K V D G D P T H P I T K G K I C  
UniRef90\_UPI00047C0C73 A L D I A V K D D R I V G V R G R E G D R V N H G R L G  
UniRef90\_D7AZ68 K S V C T H C S V G C V I A E V Q N G V W T G Q E P G W D S P F N C A K G A  
UniRef90\_X6L5X5 R T F C T I C H C G V L V T V K D G R P V A V K G D P T S P I G S G S L C  
UniRef90\_Q39TH0 S C G F Q V T V E N N R V M K V D G D P S P I T K G K I C  
UniRef90\_W1SAI6 R T T C A Y C G V G C G L Y I D E R G K I K G D F E H P A N R G D I C  
UniRef90\_A8UQX8 R T T C A Y C G V G C I R A E V T G P R T V T I R G D E A H P A N V G R L C  
UniRef90\_UPI0003B57A74 S L K G D A E H P A N Y G R L C  
UniRef90\_F7RU77 R T I C S H C S V G C V I A E V Q N G V W T G Q E P A F D H P F N A G G H C  
UniRef90\_A6D832 K T I C T H C S V G C V I A E V Q N N V W V R Q E V A H D H P I S H G H C  
UniRef90\_Q30SD2 C V L C S N G C G M D I G V K D G K I V G V R G R A V D I V N H G R L G  
UniRef90\_UPI00037C0B6A K T I C S H C S V G C L Y A K V Q N G I W V D Q E P A F D H P I N R G G H C  
UniRef90\_E1SNX9 T G S H W G A F R A H I Y A G K V Q E I K P L E L D K N P T E M L N  
UniRef90\_UPI0004727C16 C P F C S M Q C K K E V V R Q I T T K G L K Y K T D N P T H G R L C  
UniRef90\_UPI0003B60CE6 T H C C F C G Q C G I Q L K V R H N E V I G F E P W E D F P N R G M L C  
UniRef90\_S4XXD0 C R F C G T G C I M V A T K A G R V V A T H G D T Q A E V N R G L N C  
UniRef90\_V9VXK3 G A C P H D C P T C S M I Y E V V D G R L S Y V R G N K E H P M T R G G L C  
UniRef90\_D8JXA9 S D G F K P H T S H W G V F S A R N G K A L E V R A Y A G D P D N G I I D  
UniRef90\_W1JK38 R T I C T H C S V G C V I A E V K S G V W T G Q E P A F D H P F N Q G A H C  
UniRef90\_UPI0003B4D4E8 C S L K T W V K D G V I T F V E G A P E H G T P C V K G L  
UniRef90\_UPI00036663D7 C P F C S M Q C K K K V I E E R R Y V Y H T V G M D N P T T H G R L C  
UniRef90\_G9Y896  
UniRef90\_E2DDC6  
UniRef90\_UPI0003774017 C R L C S A C C P V E V E I R N N K I T S V Q R I K R Y S D A L H Q V C  
UniRef90\_F8AE19 C S M I S E L R N G R L V I R G N P E H P V I T R G F L C

UniRef90\_UPI00037AD92D A A P H I V Y A P 50 DR L T S P L V R N 60 N A D R N Q N F K K 80  
UniRef90\_UPI00036D0DB9 T K G L T A H Q P L S A S G R M A D A Y L R Q Q R S Q P P V R  
UniRef90\_E6W1W4 V K G F S M Y H P D R L I K T H P L I R Q S S D G N F K R  
UniRef90\_B0G5V4 S K G E Y I Y R E D R I K T P L K R V G K R G E G K F F P  
UniRef90\_A8H719 A G H S Q L Y D K Q R I V K P L K R V G E R G E G N W Q E  
UniRef90\_R7PM17 K S P E I V Y S E K R I L H P L I R C G E K G E G R F R R  
UniRef90\_J1ER37 A K V E R S Y H P E R V L T P L K R S G P K G S Q Q F T P  
UniRef90\_D5AQH0 V K G R F A Y H Q D R L L K P M I R D K I T D P W R E  
UniRef90\_K0F0B3 T K G A T H L E L M R T P G R M E T A F R R P E R G Q E P V P  
UniRef90\_E8LU42 A L A Q S L D M P S R L L Y P K Y L E Q G Q E  
UniRef90\_F5SUW1 V K L K R H Y H P D R L L Y P M R R S G P K G S G Q F E R  
UniRef90\_UPI000468B902 A R H S L L Y D P Q R I V K P L K R V G E R G E G K W A E  
UniRef90\_UPI000370CE88 P K G L H G N S A D R L T H P L I R Q D G E L K P  
UniRef90\_J71VW5 P K M N H V H S P Q R L L K Q P L L R I G E K G A G N F K P  
UniRef90\_V6T8C6 A R G H G V Y S Q D R L T Q P L K R I G E K K F E P  
UniRef90\_R4SJA2 Q K G W T L T S P S R L L T P L I R V D G E L R P  
UniRef90\_UPI0003B5D45E S K G E T V G H Q G R L L A P N I D G A D  
UniRef90\_UPI0004715479 I K G L A S P D R L T H P D R L R H P L K R A G E R G K G K W T E  
UniRef90\_D9V717 Q K G W T L E S A A R L T S P L L R R D G E L Q P  
UniRef90\_UPI0003FF00A4 S K G E T V S H E G R L L H P S I D G I E  
UniRef90\_A3SJR7 S V R E H A H G E R R L K Y P M K K E G G E W K R  
UniRef90\_UPI000376129F A R G N A L Y D P D R L L K Y P L L R K G E R G E G K W Q R  
UniRef90\_UPI000375BBF2 P K W Q A N A S A D R L T T P L I R E G G K L V E  
UniRef90\_UPI00045E73C0 V K L K R H Y H P D R L L Y P M R R N G P K G S G Q F T R  
UniRef90\_N9Y1J9 I K G L N L D K Q N T I I K T P K G P K I K N E N G V M E T  
UniRef90\_V4YKM4 T K V E R T Y H P D R L T T P L K R V G A K G E G R F E A  
UniRef90\_A0A031MDV5 A L A D T L G L E G R C L Q P L L R D G E G R T Q A  
UniRef90\_UPI00039C283E V K V N H T R A P D R L L Y P M R R V G P K G S G R F E R  
UniRef90\_M3IKM8  
UniRef90\_W9A0D5 A K A E T L T N D N R M L M P Q I L R E K P  
UniRef90\_UPI0003B35EAD A G T G L I Y D H R P Q T P L I R E G E R G E G K W R K  
UniRef90\_UPI0003813F52 T K G A T S A A P G R L E T A L L R P E R G A T P I A  
UniRef90\_D3SMG9 Q K P V Y M M D S G R I L T V P L Y R E N K D G P F R E  
UniRef90\_UPI00037B5DF8 P K W Q A N N S P D R L L T S P L I R S E H G E L V P  
UniRef90\_F4B860 G K F K S L Y A E D R V L Y P L K K E G E K F V R  
UniRef90\_D8HQV3 A A P E I V A H P E R L L H P L I R D G R R T A P K G A A D P G W E R  
UniRef90\_S2Y9A3 M A P K L I Y S E K R I R T P L I R D G E R G S G K F R K  
UniRef90\_W1B2Q1 A L G E T T G L A G R L L K P E V D G Q Q  
UniRef90\_F7UWH3 T Y L D Y H Y S E D R I L Y P M K R V G A K G P G A Q F E R  
UniRef90\_T0IQN9 S L P E Y V H H P D R I L Y P M K R A P E D R G K D K W E K  
UniRef90\_W0EC05 E K A K Y I Y G S D R V L F P M R R S G P K G S G Q F E R  
UniRef90\_Q0G143 S V R E H A H G E R R L K Y P M K L V G G K W Q R  
UniRef90\_R1FG86 S Q R Q Q V Y G V D R L K Y P M K R K H W E P V R L T R P L V R D S G V L R P  
UniRef90\_D6XU80 T K G M N A H H S S R I L T R P L L G G G D K S R R G E D E W E R  
UniRef90\_S6FBX6 D L P E I V H S P S R V L Y P M K R A K E D R G K D K W E R  
UniRef90\_UPI00036B751C P K G L H V L S K D R L T H P L K K V G E D F V K  
UniRef90\_I3REZ8 N M A R Q K Q H Y T R L T E P L V R E N G V L R P  
UniRef90\_F8BLG0 I K G L S L D K K Q T V V K T S P L P K I R Q A D G S M K E  
UniRef90\_N9X2X7 A K I M S L Y D P N R L K Y P L I R V G K R G E G K F K K  
UniRef90\_UPI0003B740F1 M K G M L F Y H P E R L K K P L Y R A S K K E K F R E  
UniRef90\_F8AE26 A R G N A G Y N P E R L K E P L L R V G K R G E G K W K  
UniRef90\_UPI0003B625C5  
UniRef90\_UPI0004219AAC A K T Y R Y R V Q Q E T I L Y P M R R I G R K G E G R F R R  
UniRef90\_B7A8B3 I K G L S L D K Q Q T I I T D S T L P R I K Q E D G S F K R  
UniRef90\_M1MFV0 P K W W A N N S L D R L T R P L I R N R S G T L V P  
UniRef90\_G8N4D5 V K G F H L Y G K D R I K K A Q I R K N G K M V E  
UniRef90\_M1PJT4 I K G L N L D K Q N T I Y E N P V L P L L K N K G Q F E H  
UniRef90\_R9CBZ5 V K G Y F L Y G K D R L E Q P L L H E D X V Y K R R K K D G K Y D K E G E F T P  
UniRef90\_G8PIR2 A A T E V V H E D R L T E P L I R E N G E L V E  
UniRef90\_MOLTB2 P K W G V A H K D R L T R P L V R M K D G K F D K N G E F S P  
UniRef90\_UPI00035ECC72 I K G Y F L Y G K D R L T S P M L R M T N G V Y D K E G E F E P  
UniRef90\_UPI00036B031B G G V G M Y Y D E D R L K T P L I R R R E N G R F V T  
UniRef90\_UPI000403E64C V K G Y F L Y G K D R L T T P L L K K I N G E F Q Q  
UniRef90\_Q5V6J3 A A F D V V E H E D R L T E P L V R R D G E L V E  
UniRef90\_UPI00047C0C73 G R G R M L N S P Q R L L Y P L K K I N G E F Q Q  
UniRef90\_D7AZ68 P K W Q A N H S P D R L T R P L V R R D G E L V E  
UniRef90\_X6L5X5 S V R E H A H G E R R L K Y P M K K V G G E W V R  
UniRef90\_Q39TH0 V K G P R V E H P G R L N Y P L K R I G A R G E M K W E Q  
UniRef90\_W1SAI6 G R G R M L N S P A R V L H P L K V N G N F V Q  
UniRef90\_A8UQX8 K K P I Y L T D K G R V G K P L Y R E S K D E E F R E  
UniRef90\_UPI0003B57A74 S K G T H L G L E G R L L S P M I G N Q R  
UniRef90\_F7RU77 Q K G E R L L Q T L P M P N A L R Y P R L G V D G K Q  
UniRef90\_A6D832 A K G A A L H G E R R L K Y P M V L E G G K W K K  
UniRef90\_Q30SD2 C K G A D M I D K V R G T N R L R Y P T V K V D G K W A R  
UniRef90\_E2EA35 R V R K P M I R K R G R Q S P L E E  
UniRef90\_UPI00037C0B6A P K W V A N N S A D R L K R P L I R K N G K L E E  
UniRef90\_E1SNX9 A K I H H T H S E K R V K Y P M K L S G G K W T K  
UniRef90\_B0A733  
UniRef90\_UPI0004727C16 G I K G I I Y S P S R V R Y P M V R L D W L K K H K Y S A D T R G N N R F I R  
UniRef90\_UPI0003B60CE6 V K G H S A Y H E D R I T A P M K K V N G R F K S  
UniRef90\_S4XXD0 P K G V K R Y H P D R L L R A L R R D P A A P K K V N G R F K S  
UniRef90\_V9VXK3 V K G Y F L Y G A D R L T Q P L L R K T N G V Y D K E G E F T R  
UniRef90\_D8JXA9 V K H D H A N P D R L M Y P M R R S G P K G S K Q F E R  
UniRef90\_W1JK38 N F P G A L R H Q A R I A Q P A I R R G W L E R G P G P D D R R G R D E F V S  
UniRef90\_UPI0003B4D4E8 A K G A T L H G E R R L K Y P T K L V D G K W K K  
UniRef90\_V2BJ84 S Y P R R V Y S P D R I K Y L M A Q D V R G S G N W R R  
UniRef90\_UPI00036663D7 V K G E N A Y H S E R L K H P L I K E N G E F K K  
UniRef90\_G9Y896  
UniRef90\_E2DDC6 R I R E P M I R K N G R A S P L E V  
UniRef90\_UPI0003774017 A A P E I L Y S E K R L K S P M L K D R K N K W I E  
UniRef90\_F8AEI9 P K P R W F H S E D R L K A P L V R T G E R G T G S F R E

UniRef90\_UPI00037AD92D V S W N T V L S D M A D R L L F Y K N 100 K Y G P E S V A W L K G T G E D W G P V W  
UniRef90\_UPI00036D0DB9 T S M D Q A I A A T A E R L R G I I D Q H G P D A V A L Y V S G Q M S L E A Q Y  
UniRef90\_E6W1W4 A S W N E A L D L T A E S K F K Y F H E K H G K D S V A Y Y G S G Q C T T T E E T Y  
UniRef90\_B0G5V4 I S W D E A Y A E I A E Q L N K C K K D Y G P D E S V A F Y G S G Q C T T T E E T Y  
UniRef90\_A8H719 I E W D E A Y E L I A Q N L N K I K A E H G A P E T V A F S S K S G S L S G H L F  
UniRef90\_R7PM17 A T W D E A L T F A S R G F L D L I R A K H G P Q A I L A S Y Y G G S G L E D S M R  
UniRef90\_J1ER37 V S W D E A L G D I A Q R L S T I J A A H D P E A I L P Y S Y A G T M G M V  
UniRef90\_D5AQH0 V N W T E A L D F T A T R L R A L R D S H G A D A L G V I T S S R C T N E E T Y  
UniRef90\_K0F0B3 V A V D E A V R E A A T R L S L I D E S H G P D A L A M Y V S G Q L S L E A Q Y  
UniRef90\_E8LU42 I S W D E A T D L I A D A Y H Q A I E S R G P D S T A M Y V S G Q L L T E D Y Y  
UniRef90\_F5SUW1 I S W D E A L D E I T T R W K A I I D E Y G P H A I I P Y S Y L I G N  
UniRef90\_UPI000468B902 I S W Q E A Y Q T I A S K L N Q I K A E H G P E A V A F S S K S G S L S G H L F  
UniRef90\_UPI000370CE88 A T W D E A M E L I V N R T R E L R D R Y T A S S I G F Y T S G Q L Y L E E Y Y  
UniRef90\_J71VW5 I S W A E G I Q Y I V D R W K G I I S N Y G A E A I L P Y S Y A G T M G  
UniRef90\_V6T8C6 I T W E Q A Y K E I A E K L N K I K A E H G P Q S V A L T E D P R A S G K F  
UniRef90\_R4SJA2 A T W D Q A L D L V A K R L T E I R A A K G A K G A D S V A V F E G G L T N E K A Y  
UniRef90\_UPI0003B5D45E T D W P T A L N H V A T Q F S K T I K E F G P D S V A F Y V S G Q L L T E D Y Y  
UniRef90\_UPI0004715479 I S W K D A L D E I A L N L N R T K E K Y G A R G V A F G V G  
UniRef90\_D9V717 V S W D E A L D F V A D R L A S R R E H G A D S V A V F V S G G L T N E K A Y  
UniRef90\_UPI0003FF00A4 T D W P N A L Q H V A S K F S Q A I E E H G P D S V A F Y V S G Q L L T E D Y Y  
UniRef90\_A3SJR7 I S W E Q A I N E L G D Q M E G I R E E S G P D S V Y W L G S A K H S N E Q A Y  
UniRef90\_UPI000376129F I P W D E A I D L M A E R M Q G I R E K Y T P C G H L F S A G S D  
UniRef90\_UPI000375BBF2 T D W D T A M Q R V V D R S K A L L A E Q G P S A I G F Y T T G Q L F S E E Y Y  
UniRef90\_UPI00045E73C0 I S W D E A L D E L V S R W Q A I I A E H G P Q A I V P Y S Y L I G N  
UniRef90\_N9Y1J9 V S W D K A F E E T A K R I K D I Q E K Y G K E S F A F I S T G Q L D T T E M A  
UniRef90\_V4YKM4 V S W D A A L D D T A A T L T A I A A D D P Q A I L P Y S Y A G T M G Q V  
UniRef90\_A0A031MDV5 A S W D Q A L D R V A A G M R R I I D Q H G P E A V A F Y V S G Q L L T E D Y Y  
UniRef90\_UPI00039C283E I S W D E A L D E I A T R L R A I V E E H G G E A I W P Y L G T G T L G Y L Q G  
UniRef90\_M3IKM8  
UniRef90\_W9A0D5 V S W N E A L D E T V T Q L Q S I I L N R Y G P S A V A F Y V S G Q L L T E D Y Y  
UniRef90\_UPI0003B35EAD A S W E E A F D H V A D R L G Q I I K E T H G P A R A I A F T D R D P F R D I H R  
UniRef90\_UPI0003813F52 V G V D D A I A E A V A R L R A I V D E H G P D S V A L Y V S G Q M T T E A Q Y  
UniRef90\_D3SMG9 I S W D K A Y D I L S S L L K S L D G E E V Y F Y L S G Q L L T E D I Y  
UniRef90\_UPI00037B5DF8 A S W D E A M E L I V S K M K E A L A N K G P N S I S Y S T G Q G F L E D Y Y  
UniRef90\_F4B860 I S W K E A I D E I Y F K L N K I K E Y G P F S V G F Y G G C Q N T L E E V Y  
UniRef90\_D8HQV3 I G W E E A L A T V A A R L T A I A A E S G P E A V V F G S S P S T S A M S D  
UniRef90\_S2Y9A3 A T W E E A W D V A A E G F R K V Y G A R A L V S Y I G S G R E D A I M  
UniRef90\_W1B2Q1 V A W P Q A L A E T A A R L R Q I I D Q H G P Q A V A F Y A S G Q L L T E D Y Y  
UniRef90\_F7UWH3 I S W D E A V E T I T T R F K E I E N E G S E A I V P Y T F S G T F G L T I N G  
UniRef90\_T0IQN9 I T W D E A W D I V E K V N G F K K N H G A E S I V F G G T G R E A C L Y Y  
UniRef90\_W0EC05 I S W E E A M N E I T Q R W Q T L I D K H G A E C I L P Y S Y A G T E G I I N K  
UniRef90\_Q0G143 L S W D E A I N E V G D K M L E V R E A A G P D S V Y W L G S A K H S N E Q S Y  
UniRef90\_R1FG86 A T W A E A L D R A A A G I R R T L E T R G P E A F G M F S C A R A T N E M N F  
UniRef90\_D6XU80 I S W D E A T D I T A S E I K R I K N Q Y D N R S L V T G G D I G  
UniRef90\_S6FBX6 V S W A E A L D R I K E Q I N L I Q T E Y G N D A M A V Y G S A S T N E E A Y  
UniRef90\_UPI00036B751C I T W D E A F D L V C G K V N Y F K E T Y G A Q S I M V F G G T G R E A C I Y Y  
UniRef90\_I3REZ8 V S W D V A I K E L A N K L L E I K E N Y G P D A I A F I A S S K V S N E E N Y  
UniRef90\_F8BLG0 A S W E E A L D R A A E G F R R N R E L H G P D G F G M F A C S R S T N E L N Y  
UniRef90\_N9X2X7 V S W D E G F Q V A D Q L Q E L Q A K Y G R E S V A G L S T G Q L T M E F F A  
UniRef90\_UPI0003B740F1 A S W D E A F D Y V A N K L K E I T S K Y G A K S V A S F L H G T G E E P F I I  
UniRef90\_F8AE26 I S W E E A L D I A A E K F A Q A V K N Y G P N S V A Y Y G S G Q A L T E E T Y  
UniRef90\_UPI0003B625C5 I L S Y E E A F K I I A E K F A E N K K K Y E N R S S V A F A S S E G F Q E  
UniRef90\_UPI0004219AAC  
UniRef90\_B7A8B3 V S W E E A L D G I A Q R L M E V L D R E G G E A V L P Y H Y A G T M G L L E N  
UniRef90\_M1MFV0 I P W D D A Y K I V A D K F I I D L Q A K Y G T E S I A G I S T G Q L T L E E F A  
UniRef90\_G8N4D5 A S W N D A L S L V E K T K E L L S A H G P E S I A V Y H S G Q L Y L E E Y Y  
UniRef90\_M1PJT4 V P I S E A L D V I A D K I K E T I A K H G K D S V A M Y G S G Q W T I P D G Y  
UniRef90\_R9CBZ5 I S W G E A F N I F A N K I K D I Q N R Y G K E S F A F L S T G Q L C T E D M A  
UniRef90\_G8PIR2 V S W D E A F D I M A D K A K E A I K K N G P Y S V G M F G S G Q W T V W E G Y  
UniRef90\_MOLTB2 Q A Y D R V V S E L E R I R E E Y G P D A M G F F G S K T F N E E N Y  
UniRef90\_UPI00035ECC72 T D W D T A M E R I V S R S Q L L K D K G P L S H G F Y T S G Q L F L E E Y Y  
UniRef90\_S6AB21 I S W D Q A F D V M A E K C K A T L K A K G P T A V G M F G S G Q W T V W E G Y  
UniRef90\_UPI00036B031B A S W E E A F T Y I A N K L N I K E K Y G P E S V A L F T H G S G  
UniRef90\_UPI000403E64C I S W D E A F D I M A E K F K A A L K K G P T S V G M F G S G Q W T V M E G Y  
UniRef90\_Q5V6J3 A L W E T A L S R V T D Q L G E I I D Q H G P D A V E F F A S N C T N E E N Y  
UniRef90\_UPI00047C0C73 I S W K Q A L D E I A N K L K D I K E T Y G S T A V F H S H D  
UniRef90\_D7AZ68 T D W D T A M D L V V R R S G E L L D E Q V G P S A I G F Y T S G Q L F L E E Y Y  
UniRef90\_X6L5X5 I S W E E A I N E I G D Q M S I R E E S G P D S V Y W L G S A K H S N E Q A Y  
UniRef90\_Q39TH0 I S W E Q A L D E I A A K L S L R D Q F G P E M L A T L G G T H K G P G D W S  
UniRef90\_W1SAI6 I S W E Q A L D E I A A K L T D I R K Y R T T A V L H S H D  
UniRef90\_A8UQX8 V T W E E A Y A I L R E R L S S L K P E E T Y F Y L S G Q L L T E D I Y  
UniRef90\_UPI0003B57A74 T D W D S A L N L V A E R M R A T I A A H G P D S V A F Y V S G Q L L T E D Y Y  
UniRef90\_F7RU77 L S W D E A T A L I A N K F S A T I A E H G S D S V A F Y L S G Q L L T E D Y Y  
UniRef90\_A6D832 L S W D E A I E Q I G N K V L E I R K E S G P D S V Y W L G S A K H N N E Q A Y  
UniRef90\_Q30SD2 L E W D K A M S Q V S N Q L S I R E K Y G A D A V Q F L G S A K V S N E Q A Y  
UniRef90\_E2EA35 V E W D E A I K F V A D N L T K I K N K W G P D S I M G T G S G R S T N E N N Y  
UniRef90\_UPI00037C0B6A S S W D E A M E L I V K K S K E V I E K Q T S L G I G F Y T S G Q L F L E E Y Y  
UniRef90\_E1SNX9 L S W D Q A V N E L G D L M L K I R E E S G P D S L Y F M G S A K T N N E Q S Y  
UniRef90\_B0A733  
UniRef90\_UPI0004727C16 V T W D E A L D L F Y R E L E R V Q K E Y G P W A L H A G Q T G W N Q T G S F N  
UniRef90\_UPI0003B60CE6 I E W D E A L D L I E R Q R T K D I I Q Q T S G K N A L S V Y G G S L T N E E S Y  
UniRef90\_S4XXD0 I P Y A E A L E S A R A R L Q E Q H G P A S I G V L G G A S L T T E E T Y  
UniRef90\_V9VXK3 V S W D E A F D I M A E K W K K T L A E K G P E G I G M F G S G Q W T V W E G Y  
UniRef90\_D8JXA9 I T W D E A I S E I G K R W R A I A E Y G S Q A M P Y S Y L I G N M G L V I Q G  
UniRef90\_W1JK38 V S W D K A L D L G E L I R I R D T S G P G A V F G G S Y G W S A G R F H  
UniRef90\_UPI0003B4D4E8 V S W E E A L S E I G D K L K I R E E S G P D S V Y L L G S A K H N N E Q A Y  
UniRef90\_V2BJ84 I S W E E A M Q R I A A K M L E I K K K D G S M L G L A L T K Y S G K F G V L N  
UniRef90\_UPI00036663D7 A T W E E A L T L K K R T E E I G N E F G A N A H S V Y G G S L T N E E A Y  
UniRef90\_G9Y896  
UniRef90\_E2DDC6 V S W D E A V A F V A G N L K K I K E K W G P D S I L G A G S A R G P G N E A N  
UniRef90\_UPI0003774017 V N W E K A I D M V A Q K M T D I K D K Y G P E A V C W L R G Q A P D W G G A W  
UniRef90\_F8AE19 V S W E E A I N L V A R K L K E T I E E H G S E S V L V Y Q Y A G D R G V V N Y

UniRef90\_UPI00037AD92D Q Y T Q R F M H A F G S P N V I G N G S R L C H A T R A L P A F I T Y G T G T R P  
UniRef90\_UPI00036D0DB9 L A N K L A K G F I R T R H I E S N S R L C M A S A S S G Y K L L S L G A D G P P  
UniRef90\_E6W1W4 S F N K L W K A G F R S N M V E N G P R L C M A S A V G G Y I S T Y G A D E P A  
UniRef90\_B0G5V4 W Y R Q L I R R L A Y A F G S P N V G C E S S A C Y T A A F M A W K V A A G E Q  
UniRef90\_A8H719 H L A K A F G S P N T F T H A S T C P G S Y V I A A K A M F G G  
UniRef90\_R7PM17 E N A G L F R V F F G S P N D M G P G S L C N T S S C V F T P M T T  
UniRef90\_J1ER37 Q G E S M D R R F F H Q L G A S L L D R T I C A S A G A E A L V I Q T  
UniRef90\_D5AQH0 L V I Q K L A R A V F G T N N T D T C A R V C H S P T G Y G L K Q T F  
UniRef90\_K0F0B3 L A T K L A K G Y L R T L H I E A N S R L C M A S A G T G Y K Q S L G A D G P P  
UniRef90\_E8LU42 L A N K F A K G V V G S A N I D T N S R L C M S S A V V A H N R A F  
UniRef90\_F5SUW1 Q G L V H G L N G G D A F F N K M G A T V C E R T F G E G S C T A W L L T  
UniRef90\_UPI000468B902 Y L G Q A Y G S P N S F T H N T T C P G G Y V V A A K A M F G T  
UniRef90\_UPI000370CE88 T L G V I G K A G L G T P H M D G N T R L C T A T S A A A L K E T F  
UniRef90\_J71VW5 V V Q R N C G E A F F H K L G A S R L A R T I C S S A K G Y G W S S V  
UniRef90\_V6T8C6 Y S P R F I N A L G S A N I D T N S R L C M S S A A A G L K A F G A D R G M  
UniRef90\_R4SJA2 L L G K F A R I A L G T S Q I D Y N G R F C M S S A A A G L K A F G A D R G M  
UniRef90\_UPI0003B5D45E V A N K L M K G F I G S G N I D T N S R L C M S S T V V I G H K R A F  
UniRef90\_UPI0004715479 M P K G M D H F V L T R L A N L F G S P N V V A S Q D V C H A A R E I T G I H  
UniRef90\_D9V717 L L G K F A R V A L G T S Q I D Y N G R F C M S S A A A G M R A F G  
UniRef90\_UPI0003FF00A4 V A N K L M K G F I G S G N I D T N S R L C M S S S V V I G H K R A F  
UniRef90\_A3SJR7 L F R K F A A Y W G T N N V D H Q A R I C H S T T V A G V A N T W  
UniRef90\_UPI000376129F L Q S K F V S R F G E V Y G S Y N I T S H E S L C L L S G N R A F  
UniRef90\_UPI000375BBF2 T L G T L A H G G I G T N H V D G N T R L C T A T A G E A L K E S F G C D G Q P  
UniRef90\_UPI00045E73C0 Q G L V H G L N G G D A F F N R M G A T V T E R T F C G E G S S T A W L L T  
UniRef90\_N9Y1J9 L I G H I G R T Y L G G N G D G N T R L C C M A T S V V A H K Q S F  
UniRef90\_V4YKM4 Q G E S M A A R F F N R L G A S K L D R T I C S S A G G T A L T H T Y  
UniRef90\_A0A031MDV5 V V N K L V K G W L G T A N I D T N S R L C M S S A V A G H K R A F  
UniRef90\_UPI00039C283E C E G V A G R R F W N V L G A S K H W L N I C S A A G S L G L Y R A N  
UniRef90\_M3IKM8 V V N K L A K G F I G T A N I D T N S R L C M S S A V A G H Q R A F  
UniRef90\_W9A0D5 A F L K G L G T P N Y N N H D S S C A R N V Q H S A L S  
UniRef90\_UPI0003B35EAD L S N K L A K G Y L R T N N I E S N S R L C M A S A G V G Y K Q S L  
UniRef90\_D3SMG9 V M V K L V K G L K T N N M D A N S R L C M A T P A T A Y R L V F  
UniRef90\_UPI00037B5DF8 T I A K V G R A G L G T H L L D A N T R L C T A T T E F C L L Q S F  
UniRef90\_F4B860 S F M K L A R A L G T N N V D S C A R V C H D P S A I A L K E M L  
UniRef90\_D8HQV3 S V D W L T R L R R A F G S P N F V S Y V E L C A W G R R L A T T Y T W  
UniRef90\_S2Y9A3 R C F R G K D A F F S Q L G S P N D M G C G S I C N V S S N F I T P V T T Y  
UniRef90\_W1B2Q1 A A N K L M K G F I G A N I D T N S R L C M S S A V T G Y K R A F  
UniRef90\_F7UWH3 C F F S G V L R F L Y R M G A S A L M P N M C E A A G V A A I P F T Y  
UniRef90\_T0IQN9 Y P L G F S S L Q T P N V C Y P L S G W S C Y G P R C A I T D Y I Y P E I D F A  
UniRef90\_W0EC05 A S M D R R F F N R L A S T Q L E R T I C S A A G S A G Y Q M A Y G A S R  
UniRef90\_Q0G143 L L R K F A A Y W G T N N V D H Q A R I C H S T T V A G V A N T W  
UniRef90\_R1FG86 A A Q K F A R A V I G T N N V D S C N R T C H A P S V A G L A R V F  
UniRef90\_D6XU80 R A L N L V G G H V S T W G T T S W G S W R W G P A Y F G L Q E G  
UniRef90\_S6FBX6 L L G K F A R V L G L Q T K Y I D Y N G R L C M S A A A T A G Q T F G A D R G L  
UniRef90\_UPI00036B751C Y P L G F S T L Q T P N V C Y A Q S G W S C Y G P R C S I T D Y I Y P E I D Y A  
UniRef90\_I3REZ8 L L Q K I A R L L G T N N I D N C A R L C H E A S V H A L K M T V  
UniRef90\_F8BLG0 I A Q K F A R A V I G T N N I D S C N R T U H A P S V A G L V T V F  
UniRef90\_N9X2X7 I F G H V M R N Y L K T N V D G N T R L C M A T A V V A H K Q S Y  
UniRef90\_UPI0003B740F1 L S H A I G T P N V V I P A Y S Q C M G S R E V G W V L T Y  
UniRef90\_F8AE26 L F Q K V M R A G L R T N N V E G N P R L C M A S A V G G Y L T S F G A D E P I  
UniRef90\_UPI0003B625C5 G M F H F L V Q S Y G S L N T V R H P T L C L S S T I Q G W  
UniRef90\_UPI0004219AAC Q H P L A F F R A L G A S E L L E T I C A T A G S A A W E M T  
UniRef90\_B7A8B3 L F G N V M R N Y L R T N V D G N T R L C M S T A V V A H K Q S F  
UniRef90\_M1MFV0 T I A K I T R A G L R T H H V D A N T R L C T A T A E W S L I Q S F  
UniRef90\_G8N4D5 V A S K L F K G C L G T N N V E A N A R L C M S S A V T G F M T S F G L D E P M  
UniRef90\_M1PJT4 L A G H I G R N F L G G N G D G N T R L C M A T A V V A Y K Q S F  
UniRef90\_R9CBZ5 A A K L W K A G F R S N T I D P N A R H C M A S A V G A F M R T F G I D E P M  
UniRef90\_G8PIR2 L L Q K L A R R Y G T N N V D N C T R M C H A S T V W A L R T S L G  
UniRef90\_MOLTB2 A L G L L G K A G L G T P H M D G N T R L C T A T S G A A M K E S F  
UniRef90\_UPI00035ECC72 A A S K L Y K A G F R S N N I D P N A R H C M A S A V T G F M R T F G I D E P M  
UniRef90\_S6AB21 G K E L G H F L K A Y G S N N I T A P S F A Q C R G P R E V A F L S T F  
UniRef90\_UPI00036B031B A A S K L L K A G F R S N N L D P N A R H C M A S A V G G F M R T F G I D E P M  
UniRef90\_UPI000403E64C V F Q K I A R M L G T N N V D N C A R L C H S S T V A A M S E R L  
UniRef90\_Q5V6J3 Y A N N G I L K N L D Q R F F N C Y G G V T E V G S L C T W G A G I E A Q G W D  
UniRef90\_UPI00047C0C73 T L A A I G H G A I G T N H M D G N T R L C T A T A A A A L K E S F  
UniRef90\_D7AZ68 L F R K F A A Y W G T N N V D H Q A R I C H S T T V A G V A N T W  
UniRef90\_X6L5X5 S W R F C N L F G F T P N F V N Q G R N C G V G H I L A E S S V Y  
UniRef90\_Q39TH0 Y A N N G I L K N L D Q R F F N C Y G G V T E V G S L C T W G A G I E A Q K W D  
UniRef90\_W1SAI6 V A N K F V K G F L K T N N I D A N S R L C M A T A V A A Y K L A F  
UniRef90\_A8UQX8 A A N K L A K G F V G T A N I D T N S R L C M A S A V A A H N R S F  
UniRef90\_UPI0003B57A74 V A N K L A K G Y W G T A N V D T N S R L C M S S A V S A H L R A F  
UniRef90\_F7RU77 M F R K M A S L W G T N N V D H Q A R I C H S T T V S G V A N T W  
UniRef90\_A6D832 Y L R K F A A M F G T N N I D H Q A R I U H S P T V A G V A N T W  
UniRef90\_Q30SD2 L M Q K F M R A C V G T N N I D H C A R L U H A S V V G C G A S L  
UniRef90\_E2EA35 T L A V I G K A G L G T P H M D G N T R L C T A T A A A A L K V I S F  
UniRef90\_UPI00037C0B6A L Y R K F A A M W G T N N V D H S A R I C H S T T V A G V A N T W  
UniRef90\_E1SNX9  
UniRef90\_BOA733 N C T A H M Q R A V G M H G N F I T K V G D Y S T G A G Q T I M P Y V L G S T E  
UniRef90\_UPI0004727C16 L L G K F A R V G L Q T K Y I D Y N G R F C M S S A A S A A T K T F G  
UniRef90\_UPI0003B60CE6 L L G K F A R V C L K T P Y I D Y N G R L C M V S A G A A N K K A F G I D R T T  
UniRef90\_S4XXD0 A A S K L M K A G F R S N N I D P N A R H C M A S A V G G F M R T F G I D E P M  
UniRef90\_V9VXK3 I N S G D P F F N K L G S T V N E K T F C A S G S T A W L L T  
UniRef90\_D8JXA9 H A Q S Q V H R F L N I A G Y V R S V N T Y S S G A S S V L L P Q I L C G Y E  
UniRef90\_W1JK38 L F R K M A A M W G T N N V D H Q A R I C H S T T V A G V A N T W  
UniRef90\_UPI0003B4D4E8 Y A V E G M M S S L G Y T T R F A G T P C W P A G I D A Q N Y D  
UniRef90\_V2BJ84 L L G K F A R V G L G T K Y I D Y N G R F C M S A A S A S T K T F G I D R G L  
UniRef90\_UPI00036663D7  
UniRef90\_G9Y896 Y L M Q K F I R A G V G T N N I D H C A R I C H A A S V A G S M Q T I  
UniRef90\_E2DDC6 H Y A M R L M H A F G S P N V I G N G S V C H A G R E A M Q V F T Y G E M T N P  
UniRef90\_UPI0003774017 Y F P L R L F H Y L N A A M L D Y G I C D R A G Q E A L K D V  
UniRef90\_F8AE19

UniRef90\_UPI00037AD92D D T L N A 170 E C I T V W G K N D K T S S P P D Y N L 190 200  
UniRef90\_UPI00036D0DB9 G S Y Q D F E H A D V F L V I G A N M A D C H P I L  
UniRef90\_E6W1W4 G A Y A D F E K S K C L F L V G S N M S E C H P V G F R R I M R H  
UniRef90\_B0G5V4 A D G D W D H S D L F L G W A F N P F Y S S Y M Q  
UniRef90\_A8H719 K I K R D L S N S K Y I I N F G H N L Y E G I N M S E T R G  
UniRef90\_R7PM17 Y G V T E A M L V K D L G H S E I T F C W G K N S K T D S G P L S A  
UniRef90\_J1ER37 L G G K V G M K V E F A E A Q L L I W G S N S I G S N L H F  
UniRef90\_D5AQH0 G T S A G T Q D F D S V E E T D L A L V I G A N P T D G H P V F A S  
UniRef90\_K0F0B3 G S Y D D I D H A D L F F V I G A N M A D C H P I L H  
UniRef90\_E8LU42 G E D V V P V S Y N D I D A A D M I V I C G A N T A W T H P V L F R R I Q Q A  
UniRef90\_F5SUW1 V G P T A G V D P E S F I H S K Y L V I W G C N S V S T N V H H  
UniRef90\_UPI000468B902 K V K R D L S N S K Y I I N F G H N L Y E G I N M S E T R G L L W M R I L D  
UniRef90\_UPI000370CE88 G S D G Q P G S Y F D I D V A D T I L H V G H N I S N T D T V L W M R I L D  
UniRef90\_J71VW5 M G N T L A P H P D E V K K S D F L L L W G T N A L A T N I H L  
UniRef90\_V6T8C6 A T S A D I S N A K Y I M F I G R S Y G D G I R P S S  
UniRef90\_R4SJA2 P F P V T D L A D A D A V L L I G A N P A E T M P P F T Q H L  
UniRef90\_UPI0003B5D45E G S D T V P I C Y Q D L E S A E M V I I T G S N L A W C H P V L F Q R L K A A  
UniRef90\_UPI0004715479 T C G F Y P V V D L H H P S K L V V L W G S N I T S T N E E G E I  
UniRef90\_D9V717 V D R G L P F P V T D L A N A D V L L A G A N P A E T M P P F M Q H L D  
UniRef90\_UPI0003FF00A4 G S D T V P G C Y E D L D T A E L V I T G S N L A W C H P V L F Q  
UniRef90\_A3SJR7 G Y G A M T N S Y N D I H N S K A I F I L I G G N P A E A H P V S  
UniRef90\_UPI000376129F L D T F G E V P F A D V L N S K Y I I M A G A N R F E A L V T P D  
UniRef90\_UPI000375BBF2 G S Y T D V D H A D V I A L Y G H N V A E T Q T V L W T R M L D R L  
UniRef90\_UPI00045E73C0 V G P T A G V D P E S F I H A K Y I I W A C N S V S T N L H H  
UniRef90\_N9Y1J9 G F D A P P Y S L K L E L S D T I F L F G A N P V V A H P I W G K I  
UniRef90\_V4YKM4 G A P V G M R M E A F A Q S K L I I W G S N A I A S N L H F  
UniRef90\_A0A031MDV5 G E D L V G G N Y R D L E E A D L V V L V G S N T A W C H P I V Y Q  
UniRef90\_UPI00039C283E G T A G G M D P E N F A L S K L I L L W G T N T L T S G H H L  
UniRef90\_M3IKM8  
UniRef90\_W9A0D5 G E D C V A G C Y D D L E A A D V V I L T G S N L A W C H P I L F Q R L K L A Q  
UniRef90\_UPI0003B35EAD T m G M R K A V A Y D D L K N S K H V I L Q F R N I L F E S V N V Q E V N N  
UniRef90\_UPI0003813F52 G S D A P P G S Y D D F D S A D V F L V I G S N M A D C H P I L F  
UniRef90\_D3SMG9 G S D G P P G C Y D D D D S D T F V F V G S N A A W T H P V I Y K  
UniRef90\_UPI00037B5DF8 G A D G T P A S Y D D V D E T E T L M L F G H N V A E T G T V L H E  
UniRef90\_F4B860 G V G A S S T S V V Q I P K A K A L V I A G E S T T E S H P V I  
UniRef90\_D8HQV3 G E P V P F G A Y L P D L E R A G C V L F W G Y N P S V S R L A H  
UniRef90\_S2Y9A3 G L P T F Q I V Q D I E H S E V V F V W G K N S K T D S G P L F T  
UniRef90\_W1B2Q1 G A D V V P C S Y D D V E N S D L V V L V G S N A A W A H P V L F Q R L A Q A  
UniRef90\_F7UWH3 G A Q K D V D P E Q Y P N T K L Y V S W G S N L S A T S V H A  
UniRef90\_T0IQN9 G H Y P D R Y D H P G Y K V P E Y L V L W G K M P L W S N P D G F Y  
UniRef90\_W0EC05 G V N P L E T V K A R F L L F W G I N V L E T N L H Q  
UniRef90\_Q0G143 G Y G A M T N S Y N D I H N S K A I F I L I G G N P A E A H P V S L  
UniRef90\_R1FG86 G S G G T S S Y Q E I E D A D V I V I W G G N P R E A H P I F  
UniRef90\_D6XU80 Y F E H S I N D R M D L R N S Q L I V L W G M N P A W S S P G S P T Y N  
UniRef90\_S6FBX6 T N P L S D L P H T R V I I L A G T N I A E C Q P T I M P Y F D  
UniRef90\_UPI00036B751C G Y F A E R Y D H P D F E L P K Y V V C W G K M P L A S N P D G L F  
UniRef90\_I3REZ8 G T G A Q T N P Y S D L E N F K A I M I W G Y N P A E T H P V  
UniRef90\_F8BLG0 G A G G G T S S Y R E I E D A D L I F W G S N A R E A H P I F F  
UniRef90\_N9X2X7 G F D A P G Y T L K D L E L S D T I I F I G A N P V V A H P I L W K R V  
UniRef90\_UPI0003B740F1 G T G V S G H S T F D F K N S K Y I I S F G R N L L G A L Q V R E  
UniRef90\_F8AE26 G S Y A D I E Q A F C F F I G S N M A E A H P V L F R R V M R R K  
UniRef90\_UPI0003B625C5 S S V Y G V Y P D A D L L N A M F V V M P G A N R A E A F V T P D  
UniRef90\_UPI0004219AAC I E D T D L V F V F G Y N P A D S H P I V  
UniRef90\_B7A8B3 Y G P R L A P D P E D L P E A R Y I V L W G I N S L S T N S H L  
UniRef90\_M1MFV0 G F D A P P Y T L K D A E L S D T I I L I G A N P V I A H P I L W D K I  
UniRef90\_G8N4D5 G A D G P P A C L D D L D V A E V I V F I G R N S N E T N T V L W E  
UniRef90\_M1PJT4 G F D S P P Y T F E D I E H A D V F V T W G N M A E M H P V L F S  
UniRef90\_R9CBZ5 G F D S P Y T F E D I E L S D V A I F I G C N P V V A H P I L W  
UniRef90\_G8PIR2 G C Y D D F E N A D A F V L W G S N M A E M H P V L W T R L T  
UniRef90\_MOLTB2 A G A M T N S M A D L R E E C D L F W I Q G A N P G E Q P I A N S Q Y  
UniRef90\_UPI00035ECC72 G S D G Q P G S Y D D I D H A D V I A L Y G H N M A E T Q T V L W A R V L D R L  
UniRef90\_S6AB21 G E L V L S P E R T D I R D T K C L V L I G S H L G E N M H N G Q  
UniRef90\_UPI00036B031B G C Y D D L E H A D A F V L W G S N M A E M H P I L W S R L T  
UniRef90\_UPI000403E64C G E L V L S P C Y D D L E N A D A F V L W G S N M A E M H P I L W S R L T  
UniRef90\_Q5V6J3 G A G A M T N T L D D L A E T D C L L V T G A N P A E Q H P V I F R S Y F L P  
UniRef90\_UPI00047C0C73 F G E A W S H E P N D V L D N S K N I V I W G R N V T R T N M H F  
UniRef90\_D7AZ68 G C D G Q P G S Y T D I D H A D V I A L Y G H N M A E T Q T V L W T  
UniRef90\_X6L5X5 G Y G A M T N S Y N D I H N S K A I F I I G G N P A E A H P V S  
UniRef90\_Q39TH0 G Y D T M Y A A V H P G K T M L A L I W G S N P A E S G T T V  
UniRef90\_W1SAI6 F G N A W S H E P D D I F N S K N I I W G R N V A R T N M H F  
UniRef90\_A8UQX8 G S D G P P C T Y E D I D D A D A F L F I G S N A A I A H P V L F K R V L K  
UniRef90\_UPI0003B57A74 G E D L V P C S Y T D L E E A D L V L V G S N T A W C H P V I W Q R L E A  
UniRef90\_F7RU77 G E D V V P G C Y Q D F D L A D V I V L V G A N T A W T H P V L F  
UniRef90\_A6D832 G Y G A M T N S F N D M H N C K S M L F I G S N P A E A H P V A M Q  
UniRef90\_Q30SD2 G Y G A M T N H L G D M Q N S K A L I F G A N P A S N H P I A M Q  
UniRef90\_E2EA35 G A G A M S L S I P E I D N L E M L N I G Y N A A S A H P I  
UniRef90\_UPI00037C0B6A G S D G Q P G S Y T D I D T T E A I L H V G H N V A S Q Q T V L W M R I L D R L  
UniRef90\_E1SNX9 G Y G A M T N S Y N D M H N S K S M L F I G S N A A E A H P V A  
UniRef90\_B0A733 I E D A D L F I F G Y N G A D S H P I V  
UniRef90\_UPI0004727C16 V Y A Q G T S W S E I L E N S D N I L W A N D P V K N L Q V G W N C E T H E S  
UniRef90\_UPI0003B60CE6 V D R G F T N G I E E I P N A K C L L L A G T N I A E C Q P T I M P  
UniRef90\_S4XXD0 N P W S D M V G T E V I W V A G S N V A E C S P I T  
UniRef90\_V9VXK3 G C Y D D F E N A D A F V L W G S N M A E M H P I L W T R I S D R R  
UniRef90\_D8JXA9 V G P T G A V D P E S F V H A K Y I V I W A C N S I S T N L H H  
UniRef90\_W1JK38 D I T K R N T W E Q I A A D T E I V L F G G M A K N S M V A G G S I S K H V  
UniRef90\_UPI0003B4D4E8 G Y G A M T N S Y N D I H H S K A I L L I G S N P T E A H P V S M Q  
UniRef90\_V2BJ84 M G D M W C N D P E D M V K A K Y I I I W G A N P A W C S M H S  
UniRef90\_UPI00036663D7 T N Q L A E I E E A K C I L A G T N I A E C Q P T F V P Y  
UniRef90\_G9Y896 I E D T Q C I F V F G Y N A A D S H P I V  
UniRef90\_E2DDC6 G E G A M S L S I P E I E D C E V I E N I G Y N A A A S H P I V  
UniRef90\_UPI0003774017 D Y K N S R C I L C W G R N D K D T N P S L  
UniRef90\_F8AE19 Y G T A V G M D P D E L K N Q K I I V Y W G I N A F W T N L

UniRef90\_UPI00037AD92D  
UniRef90\_UPI00036D0DB9  
UniRef90\_E6W1W4  
UniRef90\_B0G5V4  
UniRef90\_A8H719  
UniRef90\_R7PM17  
UniRef90\_J1ER37  
UniRef90\_D5AQH0  
UniRef90\_K0F0B3  
UniRef90\_E8LU42  
UniRef90\_F5SUW1  
UniRef90\_UPI000468B902  
UniRef90\_UPI000370CE88  
UniRef90\_J71VW5  
UniRef90\_V6T8C6  
UniRef90\_R4SJA2  
UniRef90\_UPI0003B5D45E  
UniRef90\_UPI0004715479  
UniRef90\_D9V717  
UniRef90\_UPI0003FF00A4  
UniRef90\_A3SJR7  
UniRef90\_UPI000376129F  
UniRef90\_UPI000375BBF2  
UniRef90\_UPI00045E73C0  
UniRef90\_N9Y1J9  
UniRef90\_V4YKM4  
UniRef90\_A0A031MDV5  
UniRef90\_UPI00039C283E  
UniRef90\_M3IKM8  
UniRef90\_W9A0D5  
UniRef90\_UPI0003B35EAD  
UniRef90\_UPI0003813F52  
UniRef90\_D3SMG9  
UniRef90\_UPI00037B5DF8  
UniRef90\_F4B860  
UniRef90\_D8HQV3  
UniRef90\_S2Y9A3  
UniRef90\_W1B2Q1  
UniRef90\_F7UWH3  
UniRef90\_T0IQN9  
UniRef90\_W0EC05  
UniRef90\_Q0G143  
UniRef90\_R1FG86  
UniRef90\_D6XU80  
UniRef90\_S6FBX6  
UniRef90\_UPI00036B751C  
UniRef90\_I3REZ8  
UniRef90\_F8BLG0  
UniRef90\_N9X2X7  
UniRef90\_UPI0003B740F1  
UniRef90\_F8AE26  
UniRef90\_UPI0003B625C5  
UniRef90\_UPI0004219AAC  
UniRef90\_B7A8B3  
UniRef90\_M1MFV0  
UniRef90\_G8N4D5  
UniRef90\_M1PJT4  
UniRef90\_R9CBZ5  
UniRef90\_G8PIR2  
UniRef90\_MOLTB2  
UniRef90\_UPI00035ECC72  
UniRef90\_S6AB21  
UniRef90\_UPI00036B031B  
UniRef90\_UPI000403E64C  
UniRef90\_Q5V6J3  
UniRef90\_UPI00047C0C73  
UniRef90\_D7AZ68  
UniRef90\_X6L5X5  
UniRef90\_Q39TH0  
UniRef90\_W1SAI6  
UniRef90\_A8UQX8  
UniRef90\_UPI0003B57A74  
UniRef90\_F7RU77  
UniRef90\_A6D832  
UniRef90\_Q30SD2  
UniRef90\_E2EA35  
UniRef90\_UPI00037C0B6A  
UniRef90\_E1SNX9  
UniRef90\_B0A733  
UniRef90\_UPI0004727C16  
UniRef90\_UPI0003B60CE6  
UniRef90\_S4XXD0  
UniRef90\_V9VXK3  
UniRef90\_D8JXA9  
UniRef90\_W1JK38  
UniRef90\_UPI0003B4D4E8  
UniRef90\_V2BJ84  
UniRef90\_UPI00036663D7  
UniRef90\_G9Y896  
UniRef90\_E2DDC6  
UniRef90\_UPI0003774017  
UniRef90\_F8AE19

L M E G I R H G A K L I V T D P V K T D L J A D S S D L W L Q I K P G C D  
F L R L L D R V K A G A K L I V V D P R R S T A T A D K A D L F L Q V R P G S D  
K R N N P D V K L I V C E P R R K T S T A S I L A D L F L P V D S P G T D  
A R H A M E L K E K G L K F I I V E D T R R T P A T E K L A D L F L Q P K D S G T D  
M M N A Q M E K G A K L V V F E P R F S I V A D K A D E W Y A I K P G T D  
Y R A L L E A K K R G A K L V V I D P Y C R A G M G E M A D M W V P I L R P G S D  
W R Y A Q Q A K R N G A K L V V C I D P R R K T E T A D G C H E H I A L R P G T D  
R L R K R L R A G A K L I V V D P R R R T D T P H R G E A W H L Q L K P G T N  
L R M V D R L K A G A K L I V V D P R R T E T A A R A D L F L Q I A P G T D  
W H I V K D A Q K N G A K V V V I D P Y K S K T A K E A D W H I A P K P G T D  
M K A Q A D K G A K L V V E E P R F S V J A D K A D E W Y A I R P G S D  
R R A A P N P K L V V I D P R E T A T A K E A D I H L A P K V G T N  
L Q N V K E A K K R G A V V W L I D T Y E N P T A Q I V D K V V L V K P G R D  
V Q A L A S A K D N G A K I V I V D P R L N N T G N L A T E W L A I R P G T D  
K E Q R P K L F I V V I D P R Q T D T C N I L A G L H L Q P A P G T D  
C S L L L E Q V R K G T E L I V I D P R R T P T A E R A T L H L A P A P G T D  
R L K A E K A K R D N L F I V V I D P R E T D T C S I L A D L H L A I Q P E T D  
L H V L K A K E Q N N A P L I V C D P R F T R T A A H A D E Y V R F R P G S D  
S M D L M T A M Q N G C K L V V L D P R F T K T A A L A N E W H P L R P G T D  
W H I V K E A Q K K G A K V V V I D S Y A S R T A K E A D W H L A P K P G T N  
R D N K N A K I V V I D P R K S E T A K E A H I W V D I K P K A D D  
W R H V Q H A K R D G A R L V C I D P R R T E T A E K C H E H I A L L P G T D  
R M M Q S R R E R P E K R I V V V D P R R T A T C E Q A D L H L S V K A G S D  
W K F I Q D A R A A G A H V V A I D P R R T A D Q A D E H L A I R P G T D

Q Q H N T K L S V V I D P R H T A S C D L A D L H L A I T P G S D  
L M D A M E K G C R L S V I D I R S N V S A S K A N N F M K I R P G T D  
L R M M E R V K A G A K L V V V D V R R T A T A D K A D L F L Q V R P G T D  
R V L K R K H D A G A Y V V I D P L K T E T A K H A D M H I Q L K P G T D  
R I M D R K S R T G A K P Y I I A V I D P R K T L T V R G A D L H I Q L R P G T N  
S Q Y I V E L K R K G G K L I V I D P R L T G I A K G A D L Y L Q I S P S T D  
A T A T T A A L R R G A K L V V V D P R R A G L A S K A D Y H W L R V R P G T D  
L Q A I K E A K K R G A K L V V I D P R G E G M A E M A D Y W I P I V P G S D  
V K F V K Q C V E N G K I A V I D P R R T A T C E I A D R H L A L A P G S D  
G H S I I D M M K R G T K I S I D P R L N F L S S R A A Y W M Q L R P G T D  
A M L A N R A R Q N G A K I V I D I H L N K T A K W A D E F Y Q I L P G S D  
L H L L K A K E E N N A P L I V C D P R F T R T A A H A D E F V R F R P G T D  
F H H V L K A V H K G A K L F V V D P R R T S T G S W A H R L L Q L E V G A D  
F L Q A K K A G A R F I V I D P M Y S E S A E L L G D E W I P V H P G T D  
K A K E N G A Y I A I D P R E T A T T K L J A D L H L K I K P G T D  
G H A I T D M M K L G T K V I M I D P R I T W L G A R E G N I N L Q I K P G T D  
M D Y I I R A K K N G A K I V I D V R E T I T M K L A D Y K V M I K P G T D  
H H A L K G H K G A K V I S V D P R R C K T A E W A D T W L G L D V G T D  
R Q N P D K K V I V I D P R K S E T A M N A D Y W Y P V K C R G D  
A E D V T E A L A R G A K L V Y C D P R F S E T A A K A Y R W L P V R P G T D  
L D N P Q K V F V I N A D P R V S P T S R I A D I H L Q F K P G T D  
T I D F Q K N K P K G Q Q L V V L D P R F T A T A A K A D K W Y P V K P G T D  
A N R V I K A K Q K G A K I V C D P R K I E T A R I A D M H L A L K N G S N  
T P F L K E A R R R G A R I V H I D P Y E N L T S R F A D W H I K I R P G T D  
R S N S E K K L I V I D P R K S E T A Q N A D Y W Y G L K G K T D  
R V L D A R R K R G T K I V E I D P R L D I S Q K M A D L S L R P K S G T N  
R M L A S R K R K N N V I I D F A T R T T R T S Q A A D K S I L F K P S T D  
R R L V D G R G E S K L I V I D P R K S E T V S N A D I W L D L K P K S D  
D R R L S N P D V K V A V L S T Y E H R S F D L A D I P M V F T P Q T D  
F R Q A V L D G A T V I Q V D P H A N K T T R S F G H Q H L Q L N P G T D  
A G P D R P M V C V D P R E T E V A R H A D V H L A V R P G T N  
D R R L T G K D V K V A V L S T F T H R S C E L A D I E L I F N P Q S D  
V Q E M S Q A I D N G A A L I T V I D P R F S T A A S K S K H W L P I K P A T D  
D R R L S N P D V R I V H V L S T Y T H R S F E L A D N G M I F T P Q T D  
A I R N G A T L I H I D P R E T D T T E A A D I H L D V R P G Y D  
F E K L Q E A K K Q G A K V I V I D P I Y N A T A K M A D E Y I S I K P G M D  
R V L D R L A G P N P R I L C V D P R P T P V A K R E A T L H I A P L P G T N  
L H V L R A K E Q N N A P L I V C D P R F T R T A A H A D E Y V R F R P G S D  
M E R L I Q G K K Q G M K I V V V D P R K T R V A E I A D I W V P V R P R T D  
Y E K L L D A K K Q G A K L Y V I D P I Y N A T A K I J A D E Y I T V K P G M D  
R R R E T E Q M V V I T V D P V I E T E T A K K S D L F I Q I N P G T D  
A R E A R G T K I V V I D P R R T E T A E Q A D M H V A I A P D G D  
Q R I L R A R E S R G T K L V V I D P R R T A T A R Q A D L H I A I S P G Q D  
H I L I A K E K N G C K I V V A D P R R T R T A A K S D H F C S L R P G T D  
H I L L K S K E Q N G A K I V I D P R Y S K T A A K S D I Y C R I R T G T D  
A R H M I K A K E K G A K I C I D P R F T E T A K L J A D I F L Q L K G T N  
E G E N P P K L V V I D P R K T F T A E K A T V H L A P I T G T N  
M Q H I L T A K E R G S K M I V V D P R E T R T A A H A D E Y V H I R K G T D  
A R R I V R A K E K G A T L I T V D P R V T E T A R I S D M H P I R K G T N  
F K Y L A E L K E K V A N V L S V D P V K N K T Q R Y L E N D H L Y I N P M T D  
Y F E Q A K Q N G A F I V I D P R V T E T A K M A D L H L Q L K P G E D  
T N Y I W Q A R E L G A K V I V Q D P R I L T P I A R T C D L Y L P V R P G R D  
F S Y P H V K V A V L S T F T H R S F D L A D I P A V F T P Q T D  
W P F V L E A Q K R G A K V V V I D S Y R S R T A K A G D W H L C P P G T D  
E R G M A A R K R G C E F V L V S P L R D D L P I E A G A E W M S C I P G T D  
H I F K A K E E N N A P V I V I D P R F T R T A A H A D H F L Q I R P G T D  
M K Y I Y Q A R E K G A K V V I D P R L L S Q T A A K A D L H L R V R P G S D  
F E K A K E N G S F I V I D P R E T E T S A M A D L H L K I K P G Y D  
A R R I I K A K A K G A K I V C D P R F I E T A R I A D I H V P L K N G S N  
A R R I V R A K E K G A Y I V C A D P R I T E T A R L J A D L H L Q I K G G T N  
Y E D L L Y A R S Q G A K L I V I D P V K T E J A E Q A D L W L P I Q P G T D  
H G F M L J A K R Y G L E I W T V D V V R T E T A K K S D R F F Q I K P D T D

UniRef90\_UPI00037AD92D G I L A M S M M Q V I I A E N L Y D S H F V A E W T T G F D R L T E E V R N Y A  
UniRef90\_UPI00036D0DB9 M A L L N G L L H L L H R N G H T N P D F F I A R R H T E G S W D E M P A F L D D Y T  
UniRef90\_E6W1W4 L A V F H S M A H E I K E R N G W I D K G F F V I A R R H T E R G S W D E M P A F L D D Y T  
UniRef90\_B0G5V4 G A L A H A I A N V L I E R N G W I D K P Y Y I D E Y V V Y G F E E Y A Q Y V K G F N  
UniRef90\_A8H719 V A V A L A I C H V L I E R D G L Y D K A F V V A Q Y V S G F D E F A K E V K A Y T  
UniRef90\_R7PM17 G A L A M A M T K E L L E A R H D W L D D H G F V K A R Y T R G F E A Y E S Y R L K T Q S  
UniRef90\_J1ER37 A A L A L A M M H E L I E R H D W L D D H G F V K A R Y T R G F E A Y E S Y R L K T Q S  
UniRef90\_D5AQH0 V A V M T A M A H V I V E T E N Q I F D K R F I G D R C D W D E W A D Y A E F V A  
UniRef90\_K0F0B3 L A L L N G L L H L L V I E N G D I D E D F I A E H T E G W T A M P Q E F L A D Y S  
UniRef90\_E8LU42 L A L F N G L L K Y L I E N H E Q L D D H H F F I A E H T E G A Q H H T E G S K Q L F E H L V  
UniRef90\_F5SUW1 G A L A M A M M H V I I K E G L Q D Q D Y I D N Y T V G F D A L A E R A K T R T  
UniRef90\_UPI000468B902 V A V A L A L C H V L I A D N G L Y D K A F I E R Y V E G F E A F A A E V K A Y T  
UniRef90\_UPI000370CE88 V V L L N G L L Y L L I K N G Q I D R E F I A E H T I G F E D L E H T V A A Y P  
UniRef90\_J71VW5 G A L A L G L M H I L V R E N G W I D L P F F V T K H V Q G F E E Q L Q S Q I L P D  
UniRef90\_V6T8C6 L A L V L A M S H V I I K E N G L L H D K S Y V V K S R T T N G F E E Y A K E V K K Y T  
UniRef90\_R4SJA2 L A L A Q G L L H A V V A E N G L L D K S Y V V S R T N G F E E L W R S V A A W W  
UniRef90\_UPI0003B5D45E V A L F N G L L T Y L A E Q K K I N P E Y I S N Y T Q G F Q A S L K S A Q N D A  
UniRef90\_UPI0004715479 C V L A L G F L N V I T A E E S L Y D K D F V E K W T H G F E D L A G H V K P Y T  
UniRef90\_D9V717 L A L A L G L L H A V V A E N G L L D K S Y V V D L R T T G F D E M W R L A A T W W  
UniRef90\_UPI0003FF00A4 V A L F N G L L A Y L V E H K K I D N D Y I E Q H S E G F K A A L K S A Q E D M  
UniRef90\_A3SJR7 V A L T W G I L M H I F E N G W E D K E F I R T R V W G M D Q Q L R E E V A K W T  
UniRef90\_UPI000376129F M A F M L A L M H V I I N E N K R Y D Q Q W I R K E K T H G F D Q L A K H V A Q K Y T  
UniRef90\_UPI000375BBF2 V A L M N G L L H D I I A N G W V D H E Y I K A H T V G F P E L E K E V R N Y P  
UniRef90\_UPI00045E73C0 G A L A M A M L H T I I E E G L I D Q D Y V D R N T I G F A E L A E R A K S R T  
UniRef90\_N9Y1J9 L T L L Y T M A N V L I E E K N W I D K E F I E N N T E G F S E F K F V K D F T  
UniRef90\_V4YKM4 A A L A L A L M H Q L I V N D W L D H A Y I A Q H T L G F E Q L K A R A L A W P  
UniRef90\_A0A031MDV5 V W L F N G L L T Y L E E H G V Y D T E F V A N H T G G A A E A L V A A R A S A  
UniRef90\_UPI00039C283E A A L A L A L G L L N V L J A E N A Q D E A Y L A E H T E G W A G F R E E L A H P  
UniRef90\_M3IKM8 Q M G L C E Y V L Y E N G L Y D K E F I E R Y T V G F D K F K D Y F T G V K  
UniRef90\_W9A0D5 I A L F N G L L N Y L N N N N Y I D Q E Y I N A H T N N E A A L T T  
UniRef90\_UPI0003B35EAD Y A F N L A V I H E L I H N K R L Y N D K F V R K Y L E G F R D L E Q F V  
UniRef90\_UPI0003813F52 L A L L N G L L H L I V A N G D H D P D F F I A E F T T N W D A V A A M L A D Y A  
UniRef90\_D3SMG9 A F L F N A V L Y L V L Y K G C I D K D F V S Y C V E G F E E T L T T V K Y A  
UniRef90\_UPI00037B5DF8 V P L F N G L L N M V L Q N G A A D Q D F V A K H T I G F E E M R D V L E E W T  
UniRef90\_F4B860 I Y L F N A V A N Y L I S N G L I D E N F I E Q R T E G F E D Y K R V I  
UniRef90\_D8HQV3 G A L A L A L T H Q M I E E N G W Y D H D F V E A R W T N A P W T R R S V W D L I A E  
UniRef90\_S2Y9A3 G A L A L A M L K L I V E E E W Y D K E F V E A N Y T R G F G E F S V Y L K S V T  
UniRef90\_W1B2Q1 G G L F A G L L N A L A E A G A C V D G F R D G P Q A L A A A R G W D V A R S V A  
UniRef90\_F7UWH3 T P F A L G V V K I L L D E E T Y D K E Y V E D K Y C M G L D E L K K R V A D E W P  
UniRef90\_T0IQN9 T A L A L G F L N V I I N E D L Y D H K F V V W A C Y G F E E L K E R V Q Q Y P  
UniRef90\_W0EC05 G A L A L G L A H V I V R D G V H D L A W I E K Y T Q G F K E F N E E I K N Y P  
UniRef90\_Q0G143 V A L T W G I L Y H I F E N G W E D Q T F I E S R T V W G M D Q Q L R A E V A N W T  
UniRef90\_R1FG86 I P L A H A I A R E I H H S G L A N T T F I E R A T E G F A E F A S V E P W T  
UniRef90\_D6XU80 H A L M L G M A H T I I T E D L T D W D F L K S C V T V G F D E S M M Y V L G I H  
UniRef90\_S6FBX6 A A L A N G L V K I C I D E E G L T D K D F V R T R T N G F D K L A K R H T D A L D  
UniRef90\_UPI00036B751C A A V G L G L A N V I I E E E G L Y D K D F V E N W C G F D E F A R E Y P  
UniRef90\_I3REZ8 I T L A N A I M N V I I E E E L Y N K E F V K N R T T G F S E V K M A V K K Y T  
UniRef90\_F8BLG0 V A L A Y G I G R E I H A G L V N K E F I E A N A T T G F E E Y L A A C E P W T  
UniRef90\_N9X2X7 L Y L L Y T L A N V L I E K G W I D Q N Y I E A H T E G F Y G E F K E V K P F T  
UniRef90\_UPI0003B740F1 L A L I L G L I H V M I R D G L V N M D F V N K Y C F G F S Q L A E H V K Q Y T  
UniRef90\_F8AE26 L A L L N A M A Y V I V E E E K L Y D E N F I K N Y C V F R V G F E E Y K F L A  
UniRef90\_UPI0003B625C5 L A F V L G M I N V I I E E E L Y D K A F V D E Y T H G F A E L V E H V K Y T  
UniRef90\_UPI0004219AAC I A L L N A I G H V I I E E E D L Y D H A F V A A R T E G F A E Y C K I V A G Y T  
UniRef90\_B7A8B3 A A L A Y G L A H V L F R E N G L V D G E Y I A K A A L G L E A Y R E E A E R W T  
UniRef90\_M1MFV0 L Y L L Y A I A N K L I S N E Y I A N Y T E G F E E F K E F V K Q Y T  
UniRef90\_G8N4D5 V A V L N G L I H L L I A N S W I D R G Y I E R Y T V G Y E Q L E R T A A R Y T  
UniRef90\_M1PJT4 L A V A N A I C Y E I R N N W V N W D F V N K H T T F H K G K T N I G Y G T E  
UniRef90\_R9CBZ5 L R L Y T L A N V L I E K E W I D K E F I K N S T E D F F K G F K S L V K K Y D  
UniRef90\_G8PIR2 L V I A N F I A N Y I I E N E A V D M D F V S K H T N G G S K E I S F E E Y A E  
UniRef90\_MOLTB2 I P L N V V L K R T I L E H G W I D E D Y I A A H T L R F E D L A Q I E P W T  
UniRef90\_UPI00035ECC72 L A L M H G L I R E V I A Q G W I D E D Y I A A H T L R F E D L A Q I E P W T  
UniRef90\_S6AB21 L A I L N Y I A N Y I I L N G A V N E E F V K A H V N F A K G A T N I G Y G L R  
UniRef90\_UPI00036B031B L A L L L A W H V I I S E G W Y D E E Y I E K Y C F G F E E L K A H V I Q Q Y S  
UniRef90\_UPI000403E64C L A I L N F I A N Y I I K E N D A V D K D F I K K H D S G A S T P M S F E E F A D  
UniRef90\_Q5V6J3 I Q L L N S M A K V V L D E G L V D E S F V E E R T T G Y A D L T A H L D D V D  
UniRef90\_UPI00047C0C73 G L L A A G I M K E I L R L S L E D R K F I D S A F T Y G F D D V L V L L  
UniRef90\_D7AZ68 V A L M N G I L H E I L R R D M V D H D Y V E A H T V G Y D S L V A E V E G Y P  
UniRef90\_X6L5X5 V A L V W G I L Y H I F E N G W E D K E F I R T R V W G M D Q Q L R E E V M K W T  
UniRef90\_Q39TH0 G A L A L G I A H V M L R R E G L Y D R E F V A E Y C Q G F D E A R E V I E Q Y P  
UniRef90\_W1SAI6 G L L A A G I I K E M L R R G L E D R V F I A E Y T H G F A D V V R L V K S I S  
UniRef90\_A8UQX8 T V F L N S V L Y V L H E E G W I D F S F V E G Y T E G F E E A L Q Q A K N F P  
UniRef90\_UPI0003B57A74 T T L F N A L H A L C E R G L A K V E A W D G L A C D P G I P A R Q F A A L V  
UniRef90\_F7RU77 L W L F S L L F K H L A Q T D C V D H D Y I A Q H T N G M S D A L A Q L T  
UniRef90\_A6D832 V A F I W G L L W H V F E N N W E D K E F I R Q R V F G M D E I R T E V A K W N  
UniRef90\_Q30SD2 I A F M Y G M L R L I R E K W Y D K S F I D N A Y V Y G M E E I F K E C E E Y T  
UniRef90\_E2EA35 M A I T N G L A N V I I T E D L I D H A Y L D N A Y T T G F E E Y K Q T L K Y T  
UniRef90\_UPI00037C0B6A I P V M N G L L N L I I D S G R I N K E F I E N H T V G F E E L K Q I V A K W P  
UniRef90\_E1SNX9 I P F V Y G L L W H I F E N G W E D K D F I S R R V W G L D A L R E E V K N Y P  
UniRef90\_B0A733 M I L V N A F G N V L I N E N L Y D E E F I K E H T D N F E E Y K K I V E P Y T  
UniRef90\_UPI0004727C16 V A F M L A V A H V L Y N E N L Y D K K F I D T Y C L G F E E F I Q Y V Q G K T  
UniRef90\_UPI0003B60CE6 W S L T T A L L K V L F D K N L Q N K E F L E Q N R T E G A E E L A A Y V R Q Y S  
UniRef90\_S4XXD0 A A L F A G V L Q V L M I E N G W I D R A F I E Q R E T V G F D E V A A Y C R G W P  
UniRef90\_V9VXK3 L V I L N Y I A N Y I I Q N D A V H K D F V A K H V N G G S E P M S F E E F A E  
UniRef90\_D8JXA9 G A L A M G F I N S I I E Q G L V D H D Y V D K Y T Y G Y P E L K E R A A E F T  
UniRef90\_W1JK38 T A L M L G L V H T L V A E N L H D Q A F L D R Y T E G W P V F L K E R Y L T G E S  
UniRef90\_UPI0003B4D4E8 V P I T W G M M Y H I F K N G W E D K E F I R Q R V Y G M E D V K A E V M K W T  
UniRef90\_V2BJ84 G A L A L G M A R H L L D K G L V D D F V N N D A H G Y P E F E A Y L R  
UniRef90\_UPI00036663D7 Q A L A K R I A S Y L I K E D L I D E D F C R E R T N G L D E L L A Y L Q E E A  
UniRef90\_G9Y896 I A L L N A L A H V I I E E N L H D R E F I E Q H T E E F E T F R  
UniRef90\_E2DDC6 I A L T N A M A N V I I S E G L Q N D E A F I R A H T K D F D K F W E I V K E Y T  
UniRef90\_UPI0003774017 G F L A M A M M Y W M I S H Q N Y N H E F V N H W T I G F E K L T K E V L H Y S  
UniRef90\_F8AE19 V L F A L A V A K L I I E N G L Y D R D F V R E N V Y G F E E F K N Y V K K L D

UniRef90\_UPI00037AD92D P E H V I A S S I W L T P E E I R Q A A R L Y A G S K P A C I L A D G N G 320

UniRef90\_UPI00036D0DB9 P E R V A A I T G L A E A D I T K A A E W I G S A N N W M S C W T M G

UniRef90\_E6W1W4 L E Q F N P E A V E K I T R C P A E N I R Q A A Q W F A T S G A S M S V W C M G

UniRef90\_B0G5V4 E S N I E E I T G V I P Y A Q V I V Q A A E M I H E N P K M S F N E S S A P

UniRef90\_A8H719 P E W A E S I T S D V P A E D I R R I T H E Y A A A P H A M V D F G H R

UniRef90\_R7PM17 A D Q L S R Y C G I P V E Q M I E E L T R L F V S T E K I T S L V I S Y T G

UniRef90\_J1ER37 P E R A A E V C G I P V E Q I R Q L A R E Y G T T K P A A I R L N Y G

UniRef90\_D5AQH0 N P E Y A P E A V E S L T G V P A G L L R Q A A R A Y A A A P N A A I Y Y G L G

UniRef90\_K0F0B3 P A R V A E L T G L A E A D I R T A A T W I G A A G E W M T L W T M G

UniRef90\_E8LU42 S E Q V S L D S L S Q H L S L S S E Q L T T F N W F A T T K R A V T L F C Q G

UniRef90\_F5SUW1 P E W A A T I T G I S A D D I R R Q F A R E F A T T Q P A A I R L G V A

UniRef90\_UPI000468B902 P D W A E K I S D V P A A D I R R Q A A H E Y A A A A P H A V V D F G H R

UniRef90\_UPI000370CE88 P E R V A E I T G L D I A K L Q A A A D A I G Q A E R L I S T A L Q G

UniRef90\_J71VW5 Y T P D K V S Q I T G I D V K L L E E L A L H Y A K A K P F I T L G S G

UniRef90\_V6T8C6 P E W A E K I T G L P A D A I T R L A I D M G K A K P K A L I E Q S W R G A F G

UniRef90\_R4SJA2 P E R V E Q V T G V S A A D Q R R V A A K L A A A R N A Y V L T A R G

UniRef90\_UPI0003B5D45E L P H Q Q L L E K L K I P D K Q L Q C F Y Q K F A E T E K V V T I Y S Q G

UniRef90\_UPI0004715479 P E K V S E I T W V P A D L I R E A A R L Y A R S K P A A I M W G N P

UniRef90\_D9V717 P E R A E R V T G V S A A D Q R R A A E M L A R A G N A Y V L T A R G

UniRef90\_UPI0003FF00A4 P S M A Q L A T N L A L N E Q D L I S F F A H F A N T E K T L T I Y S Q G

UniRef90\_A3SJR7 P E E V E R V T G T P G S Q L K R V A M T L A N N R P G T V I W C M G

UniRef90\_UPI000376129F P E Y A A G E C G I P R E D I V R I A R E L A D A A P E S M V Y P G M R

UniRef90\_UPI000375BBF2 P A L V A E I C G V P A E Q I S E A R I I G H A E R L L S T V L Q G

UniRef90\_UPI00045E73C0 P E W A A E I T G I P A D D I R E L A R E Y A V T Q P A A I R I G V A

UniRef90\_N9Y1J9 L D K V Y D E T G I S K E R V L E L A D L I H N G K K V S F W W T M G

UniRef90\_V4YKM4 P E R A A T V C G I E V I Q Q I V Q L A H D Y A H T K P A A I R L N Y G

UniRef90\_A0A031MDV5 G R L E V V A K A C G V P V A M L Q T E Y A M E A N T R K V V T V F S Q G

UniRef90\_UPI00039C283E V E K A S E I T G I P A A D I H R L G T R L A R T R P T A I R A T M G

UniRef90\_M3IKM8 D G V K K D L K W A S K I C G V S E K E L K E L A G T L A K K D T L I V T G Y S

UniRef90\_W9A0D5 A A T L S N D E N V S Q L T G I S A E K L R T F Y Q L F A N H R T V T V Y S Q G

UniRef90\_UPI0003B35EAD L P Y T P E W A S Q E T G I P A D T L K S F V K E I A D A P A V I W H P G

UniRef90\_UPI0003813F52 P A R V A E I T G L A E A D L R T A A A W I G G A A N W M T C W T M G

UniRef90\_D3SMG9 P L V S S L C N V P L S Q I T K L A E L Y A T S K K L I S F W C Q G

UniRef90\_UPI00037B5DF8 P E R T S E V T G I P V E T L K E A G R V L S E T P S L V S T T L Q G

UniRef90\_F4B860 S K Y S V D D A E K I T G I P K E K I I E F A K L I S Q K P V I F S W G L G

UniRef90\_D8HQV3 K C A R F T P D V A E R I T G V P A D R I T A V A R L L R A R P V A F E Y T W S G

UniRef90\_S2Y9A3 L E E M S G Y C G V S V E Q L R N L T E L F M S T E K I S L V S Y T G

UniRef90\_W1B2Q1 A F C G L P A D E V A G A E T C D C T V E E L Q T F A H M Y A D A E T S L I Q I G L Q

UniRef90\_F7UWH3 A E R V A E T A E T C D C T V E E L Q T F A H M Y A D A E T S L I Q I G L Q

UniRef90\_T0IQN9 V E K V A E I T G I P A E K I R E C A R A M A T A E P T A I Q W G L A

UniRef90\_W0EC05 P E R V A K I T G L T E V E V K L A H E Y G E A H P S F I R I G N G

UniRef90\_Q0G143 P E K V E N T T G V P G S Q L Q R V A R T M A Q N R P G T L I W C M G

UniRef90\_R1FG86 L E A A E Q T T G V P A G L I R E L A H A Y A R A D R A Q L S W T L G

UniRef90\_D6XU80 D G E P K D A E W A S S I S G V D V T M I K R I A R E I A T N R A Q L L T G W A

UniRef90\_S6FBX6 L K E I S E Q T S V P L E H I R K A A V K E A K E T S G M L F T A R G

UniRef90\_UPI00036B751C P E Y A E K V T G V N A R L I R E I A E V F A K A G S G A I M W G M G

UniRef90\_I3REZ8 L E V T S R E T G V P A E L I R E L A H D Y A K A K R A Q L C W T L G

UniRef90\_F8BLG0 L D Q A Q E T A G L S P E Q I L E L A Q L I H E G K R V S F W W T M G

UniRef90\_N9X2X7 P E W A E K E T G I D A T T I E T V A W E F A K Y A N V V A V P P R R F S R Y G

UniRef90\_UPI0003B740F1 A Y T P E R A A E L C G G N I T P E I T R L V A R K F A T S P A T M S F W T M G

UniRef90\_UPI0003B625C5 P E W A E K E C E I S A E E I R W T A R E F A K Y A P R S V V Y P G

UniRef90\_UPI0004219AAC P D S V E A I T G V S A Q D I R Q A A R L Y A Q A E R A T I L W G M G

UniRef90\_B7A8B3 P E R A S A L T G V P E A I L R L A R E M G E A K R V F L R V G Y G

UniRef90\_M1MFV0 T Q N A A S V T G L S E A S I L E L E L I H N G K R V S F W W T M G

UniRef90\_G8N4D5 P E V V E Q I T G V P E R D L R T C A E W I G T S K T T V I V L L Q G

UniRef90\_M1PJT4 D H F S T D A P E N I T F E E Y K T F L Q D Y T P E K A T K K V T S F W C M G

UniRef90\_R9CBZ5 I N D I E H T G I S K G R L D L A K I I H E G K R V S F W W T M G

UniRef90\_G8PIR2 F V K P Y T L E Y A E K M S G V P A S R L L E L A K L Y A D P K V M S L W T M G

UniRef90\_MOLTB2 K A A A A E E C G L E E E L E L A A E K Y A K A D N A A I F T G M G

UniRef90\_UPI00035ECC72 P E A V A E C G V A A H D V R E A R I F G T S E R V L S T V L Q G

UniRef90\_S6AB21 P N H P Y T L D K A H E I S G V P K D K L E V L A K L Y A D P K V V S Y W T M G

UniRef90\_UPI00036B031B P E W A Y G I T T E P Q T I R E T A K E M A N A A P A V I I H P G R H

UniRef90\_UPI000403E64C Y V S E F D V E Y A E K M S G V P A D K L I K L A K I Y A D P K V T S Y W T M G

UniRef90\_Q5V6J3 V G S G A D V A G V D P E T V R E A A R A Y A E A D S A A I V T G M G

UniRef90\_UPI00047C0C73 N G I T L E K L S K M T E V P I E V M T R L G A K V F A D K P T A V F M G L G

UniRef90\_D7AZ68 P E R A A G I C G V P A E R I R E A A L L G D A E R L L S T V L Q G

UniRef90\_X6L5X5 P E E V I E R V T G T P G S Q L K R V A M T L A N N R P G T V I W C M G

UniRef90\_Q39TH0 P E R V A A I C G I P V E M I E E V A R L Y G T V R P A R L V P G V A L V Q A G

UniRef90\_W1SAI6 L E K I S E M T E V A Q E V M T R L A Q V F A D K P T A T Y M G L G

UniRef90\_A8UQX8 P D V A E S I C G V K A E D V Y L V A K L F A Q S R K L I S F W C Q G

UniRef90\_UPI0003B57A74 D L V A A S P R M V T L F S M G

UniRef90\_F7RU77 S W L G S D T V A L Q Q C G V S A S A F Q Q L L A L Y R D H Q A V M T A S C M G

UniRef90\_A6D832 P K E V I E R V T G V S E A D V Y K A A K I L S E N R P G S I T W C M G

UniRef90\_Q30SD2 P E H V E D V T G C S K E L L I Q A T T A F A T A E P G C L I W N Q G

UniRef90\_E2EA35 P E Y V G E I C G V P D D I R R A A R L F A S S H S A V M W G M G

UniRef90\_UPI00037C0B6A P E R V I E V S G V P A A K L R E A A E I L L G S A S T L V S T A L Q G

UniRef90\_E1SNX9 P D E V E N I C S A G E K Q V Y R V A K M L A D N R P G M I V W C M G

UniRef90\_B0A733 P E Y A A K Y T N I P A D M I R K T M R E Y A K A K D A M I L Y G M G

UniRef90\_UPI0004727C16 D K V E K T P E W A A A I C G V K A D K I R E F A R M L V S G R T Q I L M G W C

UniRef90\_UPI0003B60CE6 V D E L A K R A D V P Q G D I E Q A A T I F A E A G T S G M I F T A R G

UniRef90\_S4XXD0 A A R A A E V T G V P E R S I R Q A A E L W G T A R S S F L L H A R G

UniRef90\_V9VXK3 F V S E Y T L E K A E E M S G V P A V T L E K I A R L Y A D P K V M S L W T M G

UniRef90\_D8JXA9 P E Y V E K A V T G V K A A D L A K F A R E F A T A Q P S V I R L G V A

UniRef90\_W1JK38 D G Q P K H A D W A A I S G V D A D T I R K L A R R A A G K R A L I T V S H S

UniRef90\_UPI0003B4D4E8 P E E V E R V T G V P E A K V Y G A A K A M A R N R P G T F I W C M G

UniRef90\_V2BJ84 N N V T V E W A E I C G L S A D V I R Q L A E F A V K P A T V I W L G Y G

UniRef90\_UPI00036663D7 N H T S Y E E M D V E I R E V L E A H R E F G R A Q T G M I F T A R G

UniRef90\_G9Y896 L V M P Y T P E S V E I T G I S A Q M I R E T A R M Y A K A P T A I L W G M G

UniRef90\_E2DDC6 P E Y A A K I T E L R P A D D I R Q A A R K Y A S S Q H S V I L W G M G

UniRef90\_UPI0003774017 P K K V E G I V K L S A D E L I E A V Q C Y V H N P A C I A E G N G

UniRef90\_F8AEI9 V N Y V S R E T G L S V E E I E D F A F G F A E K K G V I H I G Y G



UniRef90\_UPI00037AD92D L D M N A D V T R N N V R A V C M L R A L L C G N L D I K G G D V F P Q K V P V R D  
UniRef90\_UPI00036D0DB9 L N Q S T H G T W H S N A I C N L H L A T G A I C R P G S G P F S L T G Q P N A  
UniRef90\_E6W1W4 L N Q R T R G V W A N N R A I H N L H L A T G N L G K P G A D P F S M T G Q P N A  
UniRef90\_B0G5V4 L C H R H R N G L Q A N Y R A I T A L L A I T G N F D R I G G A D I L T P H T Y M H C  
UniRef90\_A8H719 S S F T P E E F E M R R A L Y A A N V L I G N I E R K G G L Y F G K K A A S Y N  
UniRef90\_R7PM17 M E Y Q L S G G V Q A N N R A I Q L L W A I T G K V D V E G G L Y T S S G T E I P T R  
UniRef90\_J1ER37 M Q R V R G G V G N A V R A V T C L P A L T G A W H R A G G M L L S S S G S Q  
UniRef90\_D5AQH0 V T E H S Q G S T T V I A I A N L A M M T G N I G R P G V G V N P L R G Q N N V  
UniRef90\_K0F0B3 L N Q S T H G T W N T N A I C N L H L A T A G A I S R R G S G P F S L T G Q P N A  
UniRef90\_E8LU42 L V N Q S Q F G A D K A N A I I N A H L A T A G K I G R A G S G P F S L T G Q P N A  
UniRef90\_F5SUW1 V E R N Y G G G Q A I R A I T C L P A L T G A W R H V G G G A L Q F P V W E H P  
UniRef90\_UPI000468B902 S T F T P E E F D M R R A L Y A A N V L I G N I E R K G G L Y M G K K A G S Y N  
UniRef90\_UPI000370CE88 V Y Q S N Q A T A A A V Q I N N I N L I R G M L G R P G C G I L Q M N G Q P T A  
UniRef90\_J71VW5 L C R Y G N G A M T V R A I T C L P A L V G A W G K P G G G L L A S I S T G S F  
UniRef90\_V6T8C6 T E Q H A N G S T E T G R A V A M F N A L L G N Y Q Q K G G S G F G C L T G Q G N G  
UniRef90\_R4SJA2 I N Q S S Q G S D K V N S I L N C H L A T G R I G K A G M G P F S V T G Q P N A  
UniRef90\_UPI0003B5D45E I E H T S N S F N T A R A L I C L M A V S G N L D V P G S N V D A V D P K L L G  
UniRef90\_UPI0004715479 T E Q H A S S G T A T V G G W I N L A L A L G L P G R A G S G F G C L T G Q G N G  
UniRef90\_D9V717 V N Q S T Q G S N T V N S I I N C H I A T G R I G K P G M G P F S I T G Q P N A  
UniRef90\_UPI0003FF00A4 G T Q H T N G N N T R A Y C I L Q L A L G N M G V E G G G T N I F R G H D N V  
UniRef90\_A3SJR7 S S D Y E D S T Q I R R S F A L N G I L G N W D R P G G L L A A R  
UniRef90\_UPI000376129F F Y Q S N Q A T A A A V I Q V N N I N I I R G M L G K P G C G I L Q M N G Q P T A  
UniRef90\_UPI00045E73C0 L E R H H G G Q R T I R A V S C L P A L T G A W R H V G G G I L Q F P G W E H P  
UniRef90\_N9Y1J9 V N Q S Y Q A V R T A Q G I N L A L I T G N I G K P G T G P N S I T G Q C N A  
UniRef90\_V4YKM4 M Q R T R G G G N A V R A V A C L P A L I T G A W R D G A G L L L S S S G F Y P  
UniRef90\_A0A031MDV5 I N Q R S S S G T D K V N S I I N C H L L T G R L G E P G M G P F S I T G Q P N A  
UniRef90\_UPI00039C283E I Q R Q H H G E M A Y W A L I T L P A V T G D W R H P G G G V  
UniRef90\_M3IKM8 V N Q S I S G T D K V N S I I N C H L A T G R L G K L G A T P F S I T G Q P N A  
UniRef90\_W9A0D5 W M R Y K Q I S S F Y I C R S I Y I N A L L G S Y G A K G G L P F V S K P G D V G  
UniRef90\_UPI0003B35EAD L N Q S V Q G T W N T N A I C N L H L A T G A I C R T G S G P F S L T G Q P N A  
UniRef90\_D3SMG9 A F Q S S S G V A T N T A L M N L H L A T G R V I G E K G Q P N A M G G R E M G  
UniRef90\_UPI00037B5DF8 I N Q S A S D A T A A C V A I N N M H L V R G L I G K P G C G L H M A G O P S S  
UniRef90\_F4B860 L T Q S S G V N G V R A L V N L A L L T G N I G I E G G G V I V Y R G Q A N V  
UniRef90\_D8HQV3 L E Y H S N A T Q T V R A I S Q L Y A L T G C L D V P G G N V L F T P V P A N V  
UniRef90\_S2Y9A3 L E Y Q L S G V Q N N R A I Q T L W A I T G K L D V E G G I C F A E N A V V M  
UniRef90\_W1B2Q1 I N Q S A S G S D K C N A I I N V H L A S G K Y G R R G C G P F S L T G Q P N A  
UniRef90\_F7UWH3 V N R D S N G G S K I R A I S F L P A L T G Q Y Q W L T C G Y W A L N F D N V S  
UniRef90\_T0IQN9 V D E N P N G V Q L G H A I S I S A I T G N L D V P G G I T L G P P A L L G  
UniRef90\_W0EC05 F Q H H E N G G M S T W A L A C L P A L T G A W K D Q G G G L L K F N S G Y F  
UniRef90\_Q0G143 G T Q H T N G N N T R A Y C I L Q L A L G N M G K A G G T N I F R G H D N V  
UniRef90\_R1FG86 I T E H H N G T D N V L A L I N L A L L T G Q V I G R Y G A G L N P L R G Q N N V  
UniRef90\_D6XU80 P A R K N S D S W P Q M F M T F G A M T G H M A Q A G R M T G V S C H F G T G  
UniRef90\_S6FBX6 I E Q Q T D G T A A V K A F L N M V L T G K I G K P F S G Y G A I T G Q G N G  
UniRef90\_UPI00036B751C V D Q S P N G T Q V G H V T I A L A A I T G N I D P I G G L T L G P P S S L L G  
UniRef90\_I3REZ8 L T Q H V S G V E N V L A V I D I A L L L G Y I G D K G G L Y P M R G Q N N V  
UniRef90\_F8BLG0 I T E H H N G T D N V R A L C N L A L L T G Q V G R W G A G L V S I V R G Q N N V  
UniRef90\_N9X2X7 V N Q G Y A V R T A Q A I I N L A L M T G N I G R P G T G A N S I T G Q C N A  
UniRef90\_UPI0003B740F1 N D T Q T S R A I A I L N A L A G N W G V P G G I W V R S K Y A Y I L A E Y N R  
UniRef90\_F8AE26 L N Q R I R G V W A N N L V H N L H L L T G Q L C R P G A D S F S L T G Q P N A  
UniRef90\_UPI0003B625C5 T S W Y I N D V Y F R R A C A I A T A I C G C W D T P G G I M F P F Y D L V Q S  
UniRef90\_UPI0004219AAC V T Q F Y Q G V E T V R S L T S L A L L T G N L G K P S V G V N P V R G Q N N V  
UniRef90\_B7A8B3 M T R H P G G G N A L R A V I L L P A L L G A W R Y P G C G A M L S T S  
UniRef90\_M1MFV0 V N Q G Y E A V R T A Q A I I N L A L M T G N I G R P G T G A N S I T G Q C N A  
UniRef90\_G8N4D5 V Y Q S M D A T A A S L V N S M H L I T M G K I G K P G A G P F Q H A G Q P S S  
UniRef90\_M1PJT4 M N Q H V R G T W L Q N L V Y N I H L L T G K I S T P G N S P F S L T G Q P S A  
UniRef90\_R9CBZ5 V N Q G Y A V R T A Q A I I N L A L M T G N I G R P G T G A N S I T G Q C N A  
UniRef90\_G8PIR2 A N Q H T R G V W N Q M F Y N I H L L T G K I S K P G C G P F S L T G Q P S A  
UniRef90\_MOLTB2 M S Q H A C G V D N V Q N E I N L A L L T G N L G R P G T G V N P L R G Q N N V  
UniRef90\_UPI00035ECC72 F Y Q S S Q A T A S V C Q V N N L H L L R G L L G K P G C G I L Q M N G Q P T A  
UniRef90\_S6AB21 F N Q H T R G T V N N M Y N V H L L V G K I S E P G N G P F S L T G Q P S A  
UniRef90\_UPI00036B031B V T W Y G D D T Q R L R A V A L N A I L G S W R R G G F Y N P  
UniRef90\_UPI000403E64C F N Q H T R G V W A N N L M Y N V H L L T G K I S K P G S G P F S L T G Q P S A  
UniRef90\_Q5V6J3 M S Q H T C G T D N V H A L L N L A L L T G N V G R P G T G V N P L R G Q N N V  
UniRef90\_UPI00047C0C73 M Q R Y E N G G N S V R L I D A L V A I S G N L  
UniRef90\_D7AZ68 F Y Q S H Q A T A S V Q V N N I H L V C G M L G R P G A G V L Q M N G Q P T A  
UniRef90\_X6L5X5 G T Q H T N G N N T R A Y C I L Q L A L G N M G T A G G G T N I F R G H D N V  
UniRef90\_Q39TH0 Q G A S R T A T L V R A I L V A I S G N L D V L G G D P L A M K Y D E G Q  
UniRef90\_W1SAI6 L Q R Y Q N G G T I R L I D A L A A I S G N I  
UniRef90\_A8UQX8 L N Q S V N G T M K N L A I I N L H L A T G R I G N E R G C P F S L T G Q P N A  
UniRef90\_UPI0003B57A74 A N Q S T G T D K G N A I I N L H L A T G R I G Q A G A G P F S M T G Q P N A  
UniRef90\_F7RU77 V N Q S M T G T D T N A I I N C H L L K G H I G L P G C G F F S L T G Q P N A  
UniRef90\_A6D832 G T Q H T T G N N T R A Y C V L E L A L G N L G R S G G G A N I F R G H D N V  
UniRef90\_Q30SD2 W T Q H T V G S S N T R L G S L Q L V L G N M G K P G G G T N I L R G H D N V  
UniRef90\_E2EA35 V T Q F T Q G T D V I K G F C G L L L M T G N L G H E S C G V A P V R G Q N N V  
UniRef90\_UPI00037C0B6A V Y Q S M Q A T A A A V I Q V N N L H L I R G L I G R P G C G I Y Q M N G Q P T A  
UniRef90\_E1SNX9 G T Q H T S Q A N A N T R A Y C I L Q L A L G N M G V S G G G A N I F R G H D N V  
UniRef90\_B0A733 V C Q F S Q A V D V V K G L A S L A L L T G N F G R P N V G I G P V R G Q N N V  
UniRef90\_UPI0004727C16 I Q R Q E H G E Q P Y W A A A V A A M G G Q I G L P  
UniRef90\_UPI0003B60CE6 V E Q I N D G H Q A V R F I N L A L T C G H I G K P G S G Y G A I T G Q A N G  
UniRef90\_S4XXD0 I E H S N G V E N A L G T I N L V L A S G R I G K P K S G Y G T I V G Q A N G  
UniRef90\_V9VXK3 F N Q H T R G V W A N N L Y N I H L L T G K I S T P G N S P F S L T G Q P S A  
UniRef90\_D8JXA9 L E R S V G G G Q A I R A A C C L P A L V G S W R H V G G G L L Q M P L W D F P  
UniRef90\_W1JK38 L Q R A E H G E Q P V W M G L V L A A A L G Q I G L S G G G Y A Y S L G A I G Y  
UniRef90\_UPI0003B4D4E8 G T Q H T I G N N T R A Y C A F Q L A L G N M G V S G G G T N I F R G H D N V  
UniRef90\_V2BJ84 M Q R Q T N G G A N V R A L D A F V A M T G N I G V E G G G A R Y G H L H T W G  
UniRef90\_UPI00036663D7 V E Q Q T D G H E S V R H L N L L L T G K I G K D G G G Y G A I T G Q A N G  
UniRef90\_G9Y896 V T Q F Y Q G V E T V R T L T S L A L L T G N L G K A H V G V G P V R G Q N N V  
UniRef90\_E2DDC6 V T Q F A Q G V E V V K S C C S L A M L T G N F G R Y A C G T G P V R G Q N N V  
UniRef90\_UPI0003774017 L D M H C Y V S Q V T R A I A I L R A I S G N L D Q K G G G D L P Q V I P I K N  
UniRef90\_F8AE19 F Q R S L S G G E A V R A I A V L P A L V G H R F G F I Y D M K T I D K S

UniRef90\_UPI00037AD92D MS L K D S L N P K V K P V T A G Y P L F S S F N K G G G S P V S T V I P D A I  
UniRef90\_UPI00036D0DB9 M G G R D M G Y M G P G L P G Q R S A L V E D D R A F V E R Q W Q L P P G S L R  
UniRef90\_E6W1W4 C G G V R E A G A L S H L L P G T K P V A N D A W R A H V E K M W K V P M G T I  
UniRef90\_B0G5V4 G F P T R E E E Y L Y E T K P K N T K L P I G A G R F P L W D Y L E G E M Q S M  
UniRef90\_A8H719 K F A G E K P G V D G M P K I D A K R I D M V D E Q Y A L T W S S G G Y Q T I  
UniRef90\_R7PM17 K L A P K Q E I M P V G A E K Y P V F Y G L T G S W G Q F M E F  
UniRef90\_J1ER37 Y P V Q R A V L Q R P D L L A G R Q P R T I N M S T I G D D L  
UniRef90\_D5AQH0 Q G S C D M G S F P H E F P G Y R H V S D D A F E R T W G V T L S S E P G L R I  
UniRef90\_K0F0B3 M G G R E M G Y M G P G L P G Q R S V L A P A D R A F V E A T W R D E V I G P G T  
UniRef90\_E8LU42 M G G R E V G G L A N Q L A I H R G F D H Q S I E F W Q T D R L A R K P G L K A  
UniRef90\_F5SUW1 Y K F D V I C R P D L T P E G T P V V N A T Q I G R A L T G E L K L D  
UniRef90\_UPI000468B902 K F P E L G K P G V K L P K P Q A K R I D Q M D E Q F A M A W S G G G Y Q S L  
UniRef90\_UPI000370CE88 Q N G D L P A F R N W D N E D H I Q E L A A L W N V D P A I I P H W A P P T H A  
UniRef90\_J71VW5 P A F V I T S K V T R E D F L S E Q P R V N M N Q L  
UniRef90\_V6T8C6 G G K P S L G K L D K A K H P S K E P E L S K A G S K E F P I A Y P T N G V A  
UniRef90\_R4SJA2 Q G G R E H G Q K A D Q L P G Y R K I D D P A A W G V P P E S L P G P G R S A V  
UniRef90\_UPI0003B5D45E M G G R E N T L A A H M E F D N P V D H A A I S H F W K T D N L A T S A G L K A  
UniRef90\_UPI0004715479 L G P F V R A D L T P D K R K E M L G A H H G V I P R F M T V P P A Y F R K A V  
UniRef90\_D9V717 Q G G R E H G Q K A D Q L P G Y R K A R A Q V A Q V W G V E P E S L P G R S  
UniRef90\_UPI0003FF00A4 M G G R E N T L A A H M E F G D Q K A N Q L I S D F W E T E Q L A T R P G L K A  
UniRef90\_A3SJR7 Q G A T D V G V L S H T L P G Y Y G L S A G A W A H W A R V W E D S E W L S N  
UniRef90\_UPI000376129F Q V G L K G V P Y T A P W Y D D N P W D R V D G G V V P G L F E H E G S F V I T  
UniRef90\_UPI000375BBF2 E N T R E C G F R N W S N D A H I Q D L A R V W N I D P M S I P H Y S P P T H V  
UniRef90\_UPI00045E73C0 Y K F D V L C R P D L T P E G T R V I N A L Q I G R A L T D E P P  
UniRef90\_N9Y1J9 M G S R L F S N T T G L Y G G D Y G N E S E R E K V D K D M L P T K P T I P Y  
UniRef90\_V4YKM4 K Q K N A L E R P D L R R P A L G D K P S R I T N M T T I G N D L  
UniRef90\_A0A031MDV5 M G G R E V G G L A N T L A A H A R H R Q L V Q D F W Q S P V I A H E P G L K A  
UniRef90\_UPI00039C283E A Y S T S G H V H L N I D R R D D L A K P V R T L  
UniRef90\_M3IKM8 F N P A V N E K Y I A P Q G K L T K A K Y H E I P N S R L T D A I M E P G K E I  
UniRef90\_W9A0D5 M G G R E V G G L A T T L A A H L S F D R Q D H W F W Q T N N L A T K P G L K A  
UniRef90\_UPI0003B35EAD A K G L K K F M D L Y P K P E E K R A D G I G W K Y K H F E E G P G L A H L L  
UniRef90\_UPI0003813F52 M G G R E M G Y M G A G L P G Q R A V L S P D D R A F V E N I W N L D V G S G T  
UniRef90\_D3SMG9 Y L S H A L P G Y R D V R N K D H R H Q V E S F W G I P E G S T I R D K P G P T V  
UniRef90\_UPI00037B5DF8 S A N R T Y P A H R N P M N P Q H I E M A E L W N V D V S T L P A G P E K G I  
UniRef90\_F4B860 Q G S G D L I K P N V F P N G K M D E L H A L Q L K E V W G F K P P I Q Q G  
UniRef90\_D8HQV3 V D G A P L L S A E Q R A K A I G V G E R P L G E K Y A R F E F V T G S D F Y R A A  
UniRef90\_S2Y9A3 E M Q E M R K E R A V G A E K Y P L F S R L T G S G Q F V E V  
UniRef90\_W1B2Q1 M G G R E V G G L A T M L A A H M D F V P D D A R F W G T E R L A Q T P G L T A  
UniRef90\_F7UWH3 M G S E F L G A P T P G G G Y V T T W D Q I E A G A Y K Y R V L N P D Y A D V  
UniRef90\_T0IQN9 K W R V E T R S Q I S E E L W D K R I G A K E W P A L A T A L A T T H P D E T L  
UniRef90\_W0EC05 P L N K D A V I E R P D L L K S S P R V N M N Q L  
UniRef90\_Q0G143 Q G A T D L G V L A D T L P G Y Y G L T D G A W A H W L R V W E E D P K W M R D  
UniRef90\_R1FG86 Q G G D M G A I L P D R L P G F Q D V V R A K F D T A W G S A I P P R Q G L N L  
UniRef90\_D6XU80 N G G P R L V N G G A G V P P S A E N P V I E D S L V H A E M W K A I K E G E Y  
UniRef90\_S6FBX6 Q G A R E H G Q K A D Q L P G Y R H R A H L A K V W G V H Q D E L P R K G V S A  
UniRef90\_UPI00036B751C K W R M E T R K D L A P E L W D M R L G A N E Y P A L S N A M A T T H P D Y T L  
UniRef90\_I3REZ8 Q G A A Y M G A L S E F L P G Y S N F R K R V A R L W G V E D L P T E R G L Y L  
UniRef90\_F8BLG0 Q G G G D M G A I L P K N L P G F Q S V H R A K F E R M W G V T L P P K G G L T Y  
UniRef90\_N9X2X7 M G S R S Y A G G D F T N P A R R A K V A E A L G V D E S V L A E K P A T Y  
UniRef90\_UPI0003B740F1 G E C D V R E I E F R E P K E G E P P K P T D E R A D G A G T L F P G R E N G M  
UniRef90\_F8AE26 C G G V R E G G G L C H I L P G H R P V K V D K L R H Q V E D L W G V P R G R I  
UniRef90\_UPI0003B625C5 R L D I E S Y G N F D N K M P E D E R T A S G L P M D S C T Y L S E K D W R L R F  
UniRef90\_UPI0004219AAC Q G A C D M G A L P D T Y P G Y Q Y H R N K F A E A W G V E S L P A N V G Y R I  
UniRef90\_B7A8B3 G A F F L N K R F L G G R H L D E G T H P P E G Y F R P N P R V R A L N M N Q  
UniRef90\_M1MFV0 M G S R A Y S N T A V L Y G G D F D N M A R R E R V H E S D L A A K P T I T Y  
UniRef90\_G8N4D5 M G A G F Y P G Y R N D E N P K H L Q E I A D L W N V D V E T L P V G P Q T H V  
UniRef90\_M1PJT4 C G T V R E V G T L T H A L P H D R E M A A R L W D V P V T N I D P K P T Y H T  
UniRef90\_R9CBZ5 M G S R L F S N T T G L Y G G R R K V V A E A L D I D E D M L P K K S I P Y  
UniRef90\_G8PIR2 C G T A R E V G T F A H R L P A D M V V K N P K H R E T A E K I W K L P E G T I  
UniRef90\_MOLTB2 Q G T C D V G A M P N V L P G Y Q L V D D D E A R E E V W G F D L P D E P G L T  
UniRef90\_UPI00035ECC72 Q N G D L P G F R N W E N P E H I Q Q L A D L W D V D P L V I P H W A P P T H A  
UniRef90\_S6AB21 C G T A R E V G T F S H R L P A D L V V M D P K H R E T A E K I W K L P A G T I  
UniRef90\_UPI00036B031B K I L A L P E F P H P P P K P R K T W K D A F P E Q Y N M A Y E V L S T G V C E  
UniRef90\_UPI000403E64C C G T A R E V G T F S H R L P A D L V V N N P K H R A R A I A E K L W A K T G Y H A  
UniRef90\_Q5V6J3 Q G A G D V P S V L P G Y E P V I T D A D A R Q R L A D E W G V E P P S E P G L T  
UniRef90\_UPI00047C0C73 G I A G G G A F N A N R Q V G Q S F A F D E L T L A D R K Q Q H R Q F P I M K Q  
UniRef90\_D7AZ68 E N T R E C G F R N W S N D E H I S D L A A V W N L D P M R I P H Y A P T H A  
UniRef90\_X6L5X5 Q G A T D L G V L A D T L P G Y Y G L A K G S W Q H W A R V W E E D F D Y L A G  
UniRef90\_Q39TH0 F A W L D N I H W D A L V H H P Q R T R D H P K G H N A A A Y M L F A N Q N A I  
UniRef90\_W1SAI6 G I A G G A N Y A N L Q V G Q S F A F E E L T L P E R R Q N H R Q F S I M K Q  
UniRef90\_A8UQX8 M G G R E V I G Y L S N G L P G Y R D V R N E E D R F W G V E G T K P E P G P T I  
UniRef90\_UPI0003B57A74 M G G R E V G G L A N T L A C H E A E R A D V A A F W N T D R L C P G P G L K A  
UniRef90\_F7RU77 M G G R E V G G L A N T Q L A N H M G F S I E E R D F W P A S N I A S K A G L T A  
UniRef90\_A6D832 Q G A T D L G V L S H T L P G Y Y G L A D G S W K H W A K V W D V D Y E W I K E  
UniRef90\_Q30SD2 Q G S T D M G C L S D T L P G Y Y G L A E N G S W K Y F A S Q W K V D Y D W L K G  
UniRef90\_E2EA35 Q G A C D M G A L P N V Y P G Y Q S V N N P D I Q A K F E K A W G V K L S P N A  
UniRef90\_UPI00037C0B6A Q N N R E C G F R N W G N K E H I A E L A T L W N V D P D I I P H W S P P T H A  
UniRef90\_E1SNX9 Q G A T D F G L L F D N L P G Y Y G L S E G A W Q H W S R V W P C S R W H D G V  
UniRef90\_B0A733 Q G A C D M G A L P D C Y P G Y Q K V R A K F E K A W G V K L P S K V G L K L T  
UniRef90\_UPI0004727C16 Q G G R E H G Q K S D Q L P G Y R S I E D P K A R E H M A A V W N P G K G V S A  
UniRef90\_UPI0003B60CE6 Q G G R E H G Q K C D Q L P G W R D I R N P E H R R Y I A S V W G V E E Q V D A  
UniRef90\_S4XXD0 C G T A R E V G T F S H R L P A D M V V N N P E H R A I A E K I W G W V I G S H A  
UniRef90\_V9VXK3 I D W A K A A R P D W I K P G T R V V N N L K L G A  
UniRef90\_D8JXA9 Y G R R V N D V P G P T L G Q G R N G V A D F I P V A R I A D M L L G P G S T Y  
UniRef90\_W1JK38 Q G A T D L G V L A D T L P G Y Y G L A E G S W K H W A R V W D L D F D W I K  
UniRef90\_UPI0003B4D4E8 F N Y N A M L K Q P V G A I G I P F G A A G S D A V I Q Y S D R S L N I N Q T  
UniRef90\_UPI00036663D7 Q G G R E H G Q K S D Q L P G Y R K I D N K A D R W G I R E S E L P D K G V S A  
UniRef90\_G9Y896 Q G A C D M G A L P N T Y P G Y Q Y V R E K F A K A W G V P S M P A N I G H A L  
UniRef90\_E2DDC6 Q G T C D M G V L P N V Y P G Y Q S V T D P A I R A K F E K A W G A K L S D K V  
UniRef90\_UPI0003774017 F Q L R N S I W Q H P E P I S K N Y P L F S Q Y S E R R G I H T L G V L  
UniRef90\_F8AE19 Y A E G A F L R T K P I K R I P Q M K L A E Y I E R G

UniRef90\_UPI00037AD92D L D K K P Y P I K A L I I Q A S N P L V T A A N S L R V I A E A L K Q V E 410 420 430 440  
UniRef90\_UPI00036D0DB9 S E G F G Q M K A G E V K A C W V T C S N P V A S V A N R Q Q V I D G L R K A E  
UniRef90\_E6W1W4 D P K P G F P T M K P L K A M L V C T A T N P A Q S L P N L N K Y L K G M D D A  
UniRef90\_B0G5V4 D L S R Q I L E G T P Y P V K G V F A G L N V R M F P E S K K M F E A L R N L E  
UniRef90\_A8H719 L D A T L E A T P Y Q L R A W V M S R T N P M Q T M T D R A R I V K A T M Q K L D  
UniRef90\_R7PM17 P N A V L H D V P Y P V R G L I R A A S P A T S Y P E S Q K L W R Q V Y K K L D  
UniRef90\_J1ER37 L R P A S P G F G P Q V V H A V V I Y N S N P V A V A P E S G K V V Q G F A R E D  
UniRef90\_D5AQH0 P N M L D A A V I E G R F K A L Y V Q G E D L Q S D P D T R H V V S A G L A A M D  
UniRef90\_K0F0B3 I E M F R E L A A G Q D I K A A W I T C A T N P V A T V A N R K T V L D G L E A A E  
UniRef90\_E8LU42 I E M F E A V E R T P I K S M M C W N A N P V T Q A A E T N K I V E G M R E D L  
UniRef90\_F5SUW1 L D A T L E A K P Y Q L R A W V M S R T N P M Q T M T D R A K V V E S L K K M E  
UniRef90\_UPI000468B902 L N I F L L V E S G S I K R M L W I S A T N P A V S M P D L N K I R N I L E K K E G  
UniRef90\_UPI000370CE88 G Q A L I T E L S E P P I M S M Y V F H S N P A V V A P D Q T K I I K G L S R E N  
UniRef90\_J71VW5 T I V A K E A L T E D G M K S A A L Y Y H S N A A L G Y G N P K V M K E A L S K M D  
UniRef90\_V6T8C6 E L L E A L G T E D G P S A L M V F G S N L V V S A P R A G N I Q D K V S S K L D  
UniRef90\_R4SJA2 I D L F D A I D E D G K I K A L W I M A T N P V V S L P N S N K I I K A L S K K P  
UniRef90\_UPI0003B5D45E L E L L G I P Y P I K A A Y I M C T N P M L A W A D S R M T Y E A L S K L D  
UniRef90\_UPI0004715479 A V E L L D A L G E S I K A L V I F G S N P V V S A P R S S R V Q E R L A S G L D  
UniRef90\_D9V717 V D L F E A M N E G K I K A V W I M A T N P V V S L P N S N K I I E A L K K C P  
UniRef90\_UPI0003FF00A4 R E D P A N T D N P D K V R A M V L W G H A P N S Q T R M T A M K T A M E K L D  
UniRef90\_UPI000376129F R D R V L K N E P Y P V K G W F V Y K T N P M A T A P N R N K T I E M A K H M D  
UniRef90\_UPI000375BBF2 M Q M M R Y A E D G S I R M L W V S G T N P A V S L P E L K R I R S I E Q D R L  
UniRef90\_UPI00045E73C0 N M I I E K A I K G E I K A L W I V A T N P V H S W T N N E S F K V A J E N L D  
UniRef90\_N9Y1J9 N R P A S A E F G P T I A A V V V Y N S N P V A I A P D A G Q V V K G F A R D D  
UniRef90\_V4YKM4 V D L F E A V H D G R I K A L W V M A T N P V V S L P D A D R V R E A L D R D E  
UniRef90\_UPI00039C283E V M T K L A S Q L D D V K K A L W V Y A A N P L G S T P D A G A I R R Q A R E L  
UniRef90\_M3IKM8 E R N G K K Y V M P H I R V M F N A N G S T F T R H P D T N R A V A A M K K I E  
UniRef90\_W9A0D5 V D M F D A I A N G T I K A V W I J A T N P A A S L P N S N K I N R A L A Q C P  
UniRef90\_UPI0003B35EAD F E A M E T E D P Y P V K A Y I A Y R H D P L M G Y P D P D R V K K M W D K L D  
UniRef90\_UPI0003813F52 V E L F G K A A A G E I K A I W V I C T N P V A S V A N R N A V I A G L E A A E  
UniRef90\_D3SMG9 M E A V D L I L E G K I K F L W V A T N P A V T L P S L R K G V W K A L R K V  
UniRef90\_UPI00037B5DF8 E E Q L E M I E Q D Q I D I F W N I G T N P L V S L P N R K R A Q K A L G K V  
UniRef90\_F4B860 K T V T E A L Y G S N L K A V F L M N F N P A K S F P N R K V V E K F L S S L D  
UniRef90\_D8HQV3 L D G V P Y R A L V N F G A N L V L A H G D S A R G R D A L G A L D E  
UniRef90\_S2Y9A3 P K A V L R D D P Y P V R G M L I T A S S P A V T Y P Q Q N L W H E V Y K K L E  
UniRef90\_W1B2Q1 V E L F A A I G R G E V K A V W I M G T N P V V S L P D S H A V S Q A L A A C P  
UniRef90\_F7UWH3 L N E A G R Y E G E P C R A G V F V Y N G N P L V S V P D N K R V R E G A R D E V  
UniRef90\_T0IQN9 D T L E S G K P Y K L R M G W F N S T Q P L T N T A P Q R W Y K A L K T L E  
UniRef90\_W0EC05 G R A L T N L K P S I Y A L Y V Y N S N P A A V A P E Q K L V L E G L A R E D L  
UniRef90\_Q0G143 R F A V M V G K G D D N T K V M F V W G H A P N S Q T R L P E M Q K A M S Q L D  
UniRef90\_R1FG86 T Q M L D A M E R G D L T C V V V I G E N P V Q S E A D C E H T I K R L S T V D  
UniRef90\_D6XU80 T A G Y N D K R D I N I Q M I Y H G M G A T L Q T R D G Q A N G I D V H K E V E  
UniRef90\_S6FBX6 Y E M L E K I D S G D I K G L F L M C S N P A V S G P A N A N F V K Q A L K K R  
UniRef90\_UPI00036B751C D A L E T K P Y P I K M L W F N S N L L A P T C S A P I R W H D A F L K A E  
UniRef90\_I3REZ8 T E Y W D A I L K G D V K A L Y V V I G E N P A V S E A N V L K V R K A L T K L E  
UniRef90\_F8BLG0 S E M M E A M D E G H L T S V Y I V G E N P V Q S D A D T T A V E R R L R N L D  
UniRef90\_N9X2X7 N Q I I E G I N E G R I K G L W I L C T N P R H S W T N N E F A S A V K K L E  
UniRef90\_UPI0003B740F1 I E A T R M Q K P Y P I K A W L L Y G T N P I S S I G K N K L V E E V I P N L D  
UniRef90\_F8AE26 P A K P G Y H T I G K I K A I W I N C T S P A Q S L P D V D K Y R K G M R E D V  
UniRef90\_UPI0003B625C5 R E A V L K G E P Y P V T A L I V Y K Q N L I E A V P N R A K T L E M L D K M D  
UniRef90\_UPI0004219AAC S E L P H R V E H G E V R A A Y I M G E D P L Q T D A E L P A V R K A F A D L E  
UniRef90\_B7A8B3 L G T A L T A L D P P I K A L F V F N A N P R L V V A P N T G K V K A G L E R E D  
UniRef90\_M1MFV0 N A L I E K I I S G E I K G L W V I C T N P R H S W T N N K T F K E A M K K L E  
UniRef90\_G8N4D5 M E M L R L I E E G H I R M F W V I A T N P A V S L P N R K R V I E L L K Q V  
UniRef90\_M1PJT4 V E M F R A L D R G D I K F M W I Q V T N P M L T M P N L N R Y R N G V K D E R  
UniRef90\_R9CBZ5 D Q I I E G I N K G E I K A L W I A T N P A S F I N N L E F K K A E K L E  
UniRef90\_G8PIR2 P A K P G Y H A V L Q S R M L K D G K L N F Y W T Q V T N N M Y P G W R N P E N  
UniRef90\_MOLTB2 N V I E C S H E F G D S V K G L Y V M G E N P V M S E P D A N R V I E R I Q E I E  
UniRef90\_UPI00035ECC72 M Q I F R Y V E G D S I K F L W I S A T N P A V S L P Q L S R I R D I D R E G L  
UniRef90\_S6AB21 P E K P G F H A V L Q N R W V Q C N N N M Q A A A N M N E E T Y P G Y R N P A N  
UniRef90\_UPI00036B031B A S I P S A E R D S A T K G W L V N G T N L V H T L P Y Q Q Q T L E A I Q N L E  
UniRef90\_UPI000403E64C V L Q N R M L K D G K L N A Y W V M C N N N V Q A A A N I N E E V I P G Y R N P  
UniRef90\_Q5V6J3 E T T A T H Q F G D S V K A A V V F G E N P A V I T E P N A S S V R A G F D D L D  
UniRef90\_UPI00047C0C73 A E E L L T A K N P A I E M I V V T C G N P L T Q V P D S N T V S K A F A S V P  
UniRef90\_D7AZ68 M Q I M R Y A E K G S I R W V S A T N P A V S L P E L A R I R S V L A R E G  
UniRef90\_X6L5X5 R F S T I K G A D G K D K P M M N I T G I P V S R W I D  
UniRef90\_Q39TH0 Y R A V L A E E P Y P K A V I V Q N G E P L L S M G G A R A A H D A F T S P N  
UniRef90\_W1SAI6 A E E V L A A Y A P A I K M I V T C G N P L T Q V P D T H L V E R A F A S T P  
UniRef90\_A8UQX8 T E A I D L A L E G R L K F L W V V C T N P A I S L P N S D K V R R A L R E V  
UniRef90\_UPI0003B57A74 V D L F R A I D Q G G V R F L W V M A T T P A V S M P D A A F V R A A L A K C E  
UniRef90\_F7RU77 L E L F Q A M D E G K I K A V W I M A T N P L A S L P D S A L V R R A L Q T C P  
UniRef90\_A6D832 R F D Q N N I E Q N D N I R A M F Y W G H A V N S Q T R G V E M Q K A M Q K L D  
UniRef90\_Q30SD2 R F K S K E M M E S K P L K A L V C I G N G I S T P T Q T K E V K E A L D K L D  
UniRef90\_E2EA35 G L H V T R V P E H A I H G Y V Y G E D P A H S V P N L E V R E A M T K M D  
UniRef90\_UPI00037C0B6A M Q I W R Y A E Q G L I S L L W I S G T N P A V S M P E L Q R I R N I L D K E D  
UniRef90\_E1SNX9 M E D T A K L G Q K D N V R L A F F L G Q S V N T E T R G R E V R E A L N K M D  
UniRef90\_B0A733 E V P H A V L E E H K I K A Y Y I F G E D P V Q S D P D A A E V R E A L D E C  
UniRef90\_UPI0004727C16 Y E M M Q K T K N G E I K G M L I V G S N P I A S N P N A S I V K A G L E A L D  
UniRef90\_UPI0003B60CE6 Y E M F R K I D A G E I K G L F L S I C F N P K V S L P D N H F V A R Q L D K L D  
UniRef90\_V9VXK3 V K Q N R D L K D G K I N C Y W V Q V N N N M Q A G P N M M E P G Y R N P D N  
UniRef90\_D8JXA9 A L T G E M P L D P P I K S L F V F C T N P V S Q A P E T N K I V Q G Q R E D L  
UniRef90\_W1JK38 R Y N G E T R T Y P D I R L V Y W A G G N P F H H H Q D I N R L R K A F A K L D  
UniRef90\_UPI0003B4D4E8 A Q G L L E A N D P K V I R M L W V A C K N P F A Q D F D R S K M K A F S E L E  
UniRef90\_UPI00036663D7 H E M P L L M E T G K V I R S L F L V G S N P L L S N P H A D R V R R G F S K L S  
UniRef90\_G9Y896 S E V P H N I D H G L I K A H Y V M G E D P L Q T E P D L A T I R R T F E K L D  
UniRef90\_E2DDC6 R V L H E E D P A K R I H A Y Y I F G E D P G Q S D P D L E E L R E T L D R I D  
UniRef90\_UPI0003774017 T D A I L E G K P Y P I K G L I V Q G A N P I V T M A N S N R V E K A L Q K L D  
UniRef90\_F8AE19 E I K F L Y I Y N S N P L A S L P N Q N R R K A I L I E N D V

UniRef90\_UPI00037AD92D F L V V V T D L F M T R T A G Q A D I F L P A T T T F E T T Q L N M A G L N A N R  
UniRef90\_UPI00036D0DB9 L V I T Q D A F L D E T T N R Y A D I L L P A A L W A E G E G V M I G N S E R  
UniRef90\_E6W1W4 F L V V L D I F M T R T T Q F A D V I L P A A F L Y E K G G V Y G G S L E R  
UniRef90\_B0G5V4 F Y V D T D L F P M T D A A K Y A D V I L P A C S S F E R G E F K P Y R G G L J A W  
UniRef90\_A8H719 F I V A C D I L Y I S E S A K Y A D V F L P E S T Y L E R D E E L A D N S G G N H P  
UniRef90\_R7PM17 F M V V L D R F M T E D A K Y A D V I L P A T T L W E N D S F C E Y P G G  
UniRef90\_J1ER37 F T V V L E H F H T M T D T A K Y A D V I L P A T T Q L E H W D V H L S Y G H T  
UniRef90\_D5AQH0 L V I V H D L F L N E T A N Y A H V F L P G S T F L E K D G T F T N A E R  
UniRef90\_K0F0B3 L V I A Q D A Y A E T A T N A Y A D L L P A T L W A E A D A L M V T N S E R  
UniRef90\_E8LU42 L V I V S D V T A E D I A Q Y A D L L P A A G W G E K Q G M V T N S E R  
UniRef90\_F5SUW1 F L V A A E H F L S D T A S F A D I V L P A S M G A E M E D M V L S W G H L  
UniRef90\_UPI000468B902 F V V S C D V Y L S E T A A W A D I L P E C T Y L E R D E E V A D K S G K N P  
UniRef90\_UPI000370CE88 F L V V Q D A F M T E T A Y A D V V L P A A I W G E K T G C S T N V D R  
UniRef90\_J71VW5 F T V V H E R F M T D T A R Y A D I L P A T S S L E H S D I Y R A Y G H Y  
UniRef90\_V6T8C6 L V V A I D V Q M S E T A Q L A H Y V L P E V S Y L E R D E V T E G L S G K V P  
UniRef90\_R4SJA2 F L V V S D L V L S E T A A M A D V V L P V T Q W A E E D G T M T N L E G  
UniRef90\_UPI0003B5D45E L V I V S D C I D T A T T R L A N V L L P A Q G W S E K S G T V T N S E R  
UniRef90\_UPI0004715479 F L A V A D V F M T P T A A L A D I V L P A A T Q F E F D D I G H Y G L G H G  
UniRef90\_D9V717 L L V V A D F V L S E T A E L A D V V F P V P Q W A E E E G T L T N L E G  
UniRef90\_UPI0003FF00A4 T V V V S D C M E T A T T E Y A D V L L P A Q G W S E K S G T V T N S E R  
UniRef90\_A3SJR7 M L V V I D P Y P T V S A V L H D R T V Y L L P A A T Q F E T R G S V T A S N R  
UniRef90\_UPI000376129F F M T V V D I A M S D T A W M A D V L L P A P S Y L E R T D P C A Q G S V A C A  
UniRef90\_UPI000375BBF2 F L V V Q D I F L S E T A Q L A D V V L P A A T W G E K T G T F T N V D R  
UniRef90\_UPI00045E73C0 F L V S A E H F L S D T A L Y A D I L L P A S M G A E M E D I L L S W G H L  
UniRef90\_N9Y1J9 L F I V Q D I Y D D S S V Y A D I L L P S T S T L A K E G F L I N T E R  
UniRef90\_V4YKM4 F T V V L E H F Q T D T A D Y A D Y I L P A T T Q L E H W D I H A S Y G H T  
UniRef90\_A0A031MDV5 L L V V S D F A D T D T A A A Q V V L P A L G W G E K D G T V T N S E R  
UniRef90\_UPI00039C283E F T V V M E Q F P T D T V D Y A D I V L P A T M Q T E H H D L H A G Y G H L  
UniRef90\_M3IKM8 A T I T T E P F W T S T A R L S D I V L P A A L E C E R T D I E F A N S T S E Y  
UniRef90\_W9A0D5 C V I V S D C N N N D T L R H A T I K L P A Q G W S E K S G T V T N S E R  
UniRef90\_UPI0003B35EAD L L V S V T F S W S D T A W Y S D V V L P L S P Y L E R E S T I A T K N A L K P  
UniRef90\_UPI0003813F52 L V I V Q D F T D A E T N A Y A D I V L P A A L W T E V D G V F V N S E R  
UniRef90\_D3SMG9 F L V V Q D A Y F N D T V S F A N L V L P A A Q L G E K E G T M T G S D R  
UniRef90\_UPI00037B5DF8 F V I M Q D H F L T E T S K V A D V I L P A A M W G E K T G T M E N A D R  
UniRef90\_F4B860 L L V V I D S F M T E T A K F A H Y I L P A A M W A E K E G S V T S L D R  
UniRef90\_D8HQV3 F F V H T D L F L N P T A E Q A D I V L P A T S A W E A E A L R I G F E T G Q D  
UniRef90\_S2Y9A3 C L V V L D R F M T E D A K Y A D V I F P A T T L F E N Q S V V A I P G G I R M  
UniRef90\_W1B2Q1 L V I V S D V A Q T D T G R F A H I R F P A L A W G E K N G T V T N S E R  
UniRef90\_F7UWH3 F V V V S D K W Y T D T A D Y A D I L P C T D I L E T E D I H Q D Y H G W  
UniRef90\_T0IQN9 F N V V Q D C F M T P T A M F G D I F L P L P T F A E H D G V V L T H F G R N A  
UniRef90\_W0EC05 F T V V H E Q V W T D T A R W A D L V L P A T T H V I E H A D L Y V S Y W H G  
UniRef90\_Q0G143 M L V V I D P Y P T M T A V L Q D R T V Y L L P A S T Q F E T Y G S V T A S N R  
UniRef90\_R1FG86 H L I V Q D I F L T K T A Q L A D V V L P A T A A W C E S D G T F T N S E R  
UniRef90\_D6XU80 F V V T N G H F I T T N A K Y S D I V L P A T T H W E R E G G F N T G N R D  
UniRef90\_S6FBX6 F F V A Q D L F L S E T A A F A D V I L P A S S Y L A E D E G T M T N V E G R  
UniRef90\_UPI00036B751C F V V V Q D L C M T P T A M A C G D V F L P L P T T A E H D G I V I T H Y G R N  
UniRef90\_I3REZ8 L L V V Q D I F M T K T A R Y A H Y V L P A A A F C E K D G S Y M N S E R  
UniRef90\_F8BLG0 H L V V Q D I F L T K T A S L A D V V L P C T A A W C E S D G T F T N S E R  
UniRef90\_N9X2X7 L F V V Q D I Y D I E S A E E C T V F F P V V P G I K K E G T Y L N L E R  
UniRef90\_UPI0003B740F1 F I V D I D I I P N D I S M Y A D V I L P E S V Y L E R Y D L P H L Q K D A Y P  
UniRef90\_F8AE26 F M V V T D I F P T K T T E L A N L V L P T A F H F E K T G V Y G C T E R  
UniRef90\_UPI0003B625C5 F I A M V D I Q M S D T A Y A D L V I P E S T Y L E R W D P V H S L S G I W P  
UniRef90\_UPI0004219AAC L V I V Q D I F M T K T A A A D V I L P A T S W G E H E G V Y T A A D R  
UniRef90\_B7A8B3 F T V V L E Q V M T E T A L Y A D Y L L P A T L F Y E H P D L Y T S Y G H H  
UniRef90\_M1MFV0 F V V V Q D I Y D T E T S E D C H I Y L P V V P G I K K E G T Y V N T E R  
UniRef90\_G8N4D5 F L V V Q D P F F N E T A E F A D L V L P V A L W G E K E G T M T N L E R  
UniRef90\_M1PJT4 F I V V S E V Y P T P T T D V A D V I L P A T M W I E Q E G M F G N A E R  
UniRef90\_R9CBZ5 F L A L Q D I Y D T E T A K Y A H I L L P S T N G L K E G V L I N T E R  
UniRef90\_G8PIR2 F V V V S D P Y P T V S A M A D L I L P T A M W V I K E G A Y G N A E R  
UniRef90\_MOLTB2 F V V V Q D I F P T E T A E Y A D V I L P A T T W A E R D G T V T N T D R  
UniRef90\_UPI00035ECC72 F L V V Q D L Y L T E T A R Y A D V V L P A A W G E K T G T F T N V N R  
UniRef90\_S6AB21 F I V V S D P Y P T L T A M A G D L I L P T A M W M E K E G A Y G N A E R  
UniRef90\_UPI00036B031B L L V V I D T M P M E T T G Y A D V V L P E C T Y L E R Y D A L R N S P H R E P  
UniRef90\_UPI000403E64C E N F I V D P Y P T V T A Q L G D I L P T A M W V I E K E G A Y G N A E R  
UniRef90\_Q5V6J3 C V V I D L F E T A T V D H A D V V L P G S S W A E K A G T V T N T D R  
UniRef90\_UPI00047C0C73 T L V V I E Q F M T D T A K L A D Y V L P T T T V F E E D F Y Y S S M Y H H  
UniRef90\_D7AZ68 F L V V Q D I F L T E T A E L A D V V L P A A T W G E K T G T F T N T D R  
UniRef90\_X6L5X5  
UniRef90\_Q39TH0 L D V T M D L F M T P T A Q L S D Y V L P A A H Y L E R P D I S M H W G L T H L  
UniRef90\_W1SAI6 T L V V I D Q F M T D T A M L A D Y V L P T T T A F E E E D L Y Y S S M Y H H  
UniRef90\_A8UQX8 F L V V Q D S Y F N D T S Q L A N L V L P A A Q L G E K E G V T M T G S D R  
UniRef90\_UPI0003B57A74 T L V V S D V T D T D T A R L A H V R L P A L G W G E K D G T V T N S E R  
UniRef90\_F7RU77 F V V V S D I S D T D T A K L A D V L L P A Q G W S E K S G T T T N S E R  
UniRef90\_A6D832 M M V I V D P Y P T H A A V M N N R T V Y L L P A T T Q F E T H G S V T A S N R  
UniRef90\_Q30SD2 L V V E I D P Y V N D A V I T T R E L Y L L P A A S Q V E T S G T V V N T G R  
UniRef90\_E2EA35 F I V L Q D I F L N G T S L Y A D A V L P A T G W G E H N G M V A A T D R  
UniRef90\_UPI00037C0B6A F V I V Q D P F M T E T A E R A D V V L P A A I W G E K T G C F T N V D R  
UniRef90\_E1SNX9 A V V V V D P Y P T M A G V M S T R T V F L L P A A T Q F E T Y G S V S N S N R  
UniRef90\_B0A733 F V V V Q D I F M N K T G L H A D V I F P A T S W G E H D G V Y S S A D R  
UniRef90\_UPI0004727C16  
UniRef90\_UPI0003B60CE6 F L V V V D L F I S E T A E Y A D L V L P S T A Y L E E D E G T L T N M E G R V T  
UniRef90\_S4XXD0 F Y V A I D F L N D T A R H A D L V L P G S L Q E E D E G T V Q V E G  
UniRef90\_V9VXK3 F I V V S D A Y P T V T A E A D L I L P A A M W V I E K E G A Y G N A E R  
UniRef90\_D8JXA9 F T V V A E H F L T D T A K Y A D I V L P A A M A G E A E D M M W S W G H F  
UniRef90\_W1JK38 T L V V H E L G W  
UniRef90\_UPI0003B4D4E8  
UniRef90\_V2BJ84 M V V C A D Q F F N E T V Q H A D I V L P V T T A F E E W N V D A S Y W H Y  
UniRef90\_UPI00036663D7 F M V V A D M F L T E S A A Y A D V V L P T T S Y L E D E G T L T N V E G  
UniRef90\_G9Y896 I L I V Q D I F M T K T A I A D V I L P A T S W G E H E G V Y T A A D R  
UniRef90\_E2DDC6 F I V C Q D I F W N K T A L H A D A I L P A T A W G E H D G V Y T S S D R  
UniRef90\_UPI0003774017 F L V V I D P M M T Q T A F L A D I L P A S Y S F E Q D M I S N Q A L S N N  
UniRef90\_F8AEI9 F V V T H D I F L T D T A L Y S D V V F P A N T F F E R L D I A D S Y Y H R

UniRef90\_UPI00037AD92D M L L Q E K V I 490 P L G D S R P G W Q I T F D L A R A L K L D E A F P F Q T V  
UniRef90\_UPI00036D0DB9 N L T L M P R A V E P P G G Q S L P D W Q I I A R V A C A M G Y A D A F D Y P N A  
UniRef90\_E6W1W4 R S Q F T E K A V E N P P G G E A R S A D L V W I V A Q L A K R M G H E K L L P W N E A  
UniRef90\_B0G5V4 Y T N S A I E P P G G E A R S D L V Q I C  
UniRef90\_A8H719 A Y Y V R Q R V V E T I G G E D T K P S W L I W K E L A D R L G Q G Q F F P W E N M  
UniRef90\_R7PM17 I R L R E Q L I G P V L G E A K A D L F I Y Q Q L A E Y M G K T D D A F P K N K E  
UniRef90\_J1ER37 D V V L N R P A I A P V L G E A R S N A Q I F R D L A A R M G Y T D D P C F A D D D  
UniRef90\_D5AQH0 R I N R V R R V M A P K A G F A D W E V T Q M L A N A L G A G W H Y T H P S E  
UniRef90\_K0F0B3 N V T L L Q R S V E P V G E A R P D W L L I A Q V A T A M G F P G F D F D S S A  
UniRef90\_E8LU42 M L T R Q R Q F Q K P K G L A K P D W Q A I J A M V A S K V S A R L A M Q D G F K  
UniRef90\_F5SUW1 Y L T Y N E K C V D S P G E A I P N N E I F R R L A A R M G Y Q E E N F S W S D  
UniRef90\_UPI000468B902 A Y Y L R Q Q V V D V L G D A K P S W Q I F R E L G I E M G L E Q Y Y P W E N M  
UniRef90\_UPI000370CE88 T V H L S H K A I E P P G G E A K A D L D I F L D F A R R M D F R D K D G Q P L I  
UniRef90\_J71VW5 G I Q R A T G I P P V G E A K S N W E V F Q L L A Q A M G Y K E S F F A Q S A  
UniRef90\_V6T8C6 G I A L R Q Q M V D K H P E T K P T H E I Y T E L A K A C G V G Q Q Y F N F T L D  
UniRef90\_R4SJA2 R I L L R R K A I D P P S G A K T D L V L V L S E L A R R F G Q P G E Y F P M D A  
UniRef90\_UPI0003B5D45E R I S R Q R R L L P T P G S G K A D W W I V S E V A K R M G F S D A F N E F S  
UniRef90\_UPI0004715479 Y I L C R P K V V D P P P S G W S D L I R L L T E L G K L I S P P E Y F  
UniRef90\_D9V717 R V L L R R Q R S I P P P D S G V R D L S L L R E L A V R I G Q P A E R F P D D  
UniRef90\_UPI0003FF00A4 R I S R Q R R L L P S P G V A K P D W W I S E V A K C M G F A K A F N E V F S  
UniRef90\_A3SJR7 S L Q W R E Q V V D P L F E S R P D H E I A L F A K K F G F H D R L F R N I E  
UniRef90\_UPI000376129F C V V K R D P V V P A M Y E S R P V F D V L K Q V A G K L D L G E F F D F T I E  
UniRef90\_UPI000375BBF2 T V H L S E K A V D P P G E A R P D L E I F I D Y A H R M G L Q D R D G Q P L I  
UniRef90\_UPI00045E73C0 Y L T Y N A K C V E S P G E A K P N N E I F R R L A A R F G F N E D N F R W S D  
UniRef90\_N9Y1J9 R L T G L Q P V L E E K E N E K D Y E I F L G V G N A L G M G D A L N V W K T  
UniRef90\_V4YKM4 D V M L N R P A I A P V D G V K S N T D I F R E L A T R M G F V I E A C F S D S D  
UniRef90\_A0A031MDV5 Y L S R Q K A F A P P P G A K L D W W A V C E V A R R L G F Y Q G P H Q F D D  
UniRef90\_UPI00039C283E L L W N E A A A E P P G E A C L S T T E T F R R L A R H M G L Y E Q S L Y D S D  
UniRef90\_M31KM8 L F A I K P L V K P A G E S K S D F E I A R L I C A Q W G Y E Q A F S E G K T  
UniRef90\_W9A0D5 Y L S R Q R R L L P T Q G E A K P D W W I T T Q V A Q R M G F G D S F N Y T N E  
UniRef90\_UPI0003B35EAD Q F F V R R R A V D P C Y I D T K S D W E I V S G L A K R L D L P E L A F E T R  
UniRef90\_UPI0003813F52 N L T L L Q P V A D A P G E A L P D W D L J A R I A R G L G F V I E A F T Y D S A  
UniRef90\_D3SMG9 T I T L C R R W S H P P G E A R P D W Q I F T Q L A E R L G F G K S F P Y T S S  
UniRef90\_UPI00037B5DF8 T N L L R K A V E P P E G V R T D L D I L L D F A K R M D F R D K D G N P L I  
UniRef90\_F4B860 L V K W R F K A I D P L G E A K P E L E I I A D I A R K F G F N F S S D  
UniRef90\_D8HQV3 A Q Q L R R P L V A P R G E A R P D L R I I F D L A L A L G L G E H F F D G D L  
UniRef90\_S2Y9A3 R N R L A E P V G E A K N D V F I L Q G I A E R L G F G E H P F K T D E  
UniRef90\_W1B2Q1 R I S R Q R S F L P P V G E A K A D W W I A R V G Q A L G Y W Q H P H D V F R  
UniRef90\_F7UWH3 Y I L N H N T P A V E P P L G E A K T N I E M A N T L A K A M G Y T D P C F D E D  
UniRef90\_T0IQN9 I F V G A M N K A F S V G E C K S D I E V C I E L G K R L N P E N W P W E S V E  
UniRef90\_W0EC05 I L Q W A D P T I P R Q G E S K P N I E V F Q E L A Q R M G F Q E A C F Q E T T  
UniRef90\_Q0G143 S L Q W R E K V V E P L F E S L P D H A I M L K E A E K F G F A D R M F R N I A  
UniRef90\_R1FG86 R V Q R V R K A L E P P E G A R D D L E L S E L A R R L G H D W H Y T R G G E E  
UniRef90\_D6XU80 A L F Y Y R R V I E P M F E A K D D A E I T T M I G E K L G F S A E E V Y G D E  
UniRef90\_S6FBX6 R V T L R E A S R T C P G E A K H D W Q I C D I A S A L G K G H Y F P Y T S S  
UniRef90\_UPI00036B751C S V F L G A M N E A L R V G E T K S D V E I C I E F G K R L N N A G P D G T S T  
UniRef90\_I3REZ8 R I Q W S S K I C D P P G E A K P D W I L T E L A K A L G L K G F N Y S K V E  
UniRef90\_F8BLG0 R V Q L V R K A L E P P G S A K D D L E L I R L V A E R L G H A W P I Q T A E E  
UniRef90\_N9X2X7 R L S A M R P C L A K K E N E T D Y E A I L G V G K A L G M G G L L K G W E T  
UniRef90\_UPI0003B740F1 F I A I R E P A V K P L F D T K G A W D I A K G I A E R L G H G K Y F E K S V E  
UniRef90\_F8AE26 R S Q I T V K T I D P P G E A K P E V W I V R E W A L K I G L E E G F A L P K A  
UniRef90\_UPI0003B625C5 I A T F R Q P C V E P V F I T K S M F E I I V E E M L K I D S L W D D T Y E E D  
UniRef90\_UPI0004219AAC G F Q R F F K A V E P K W D L K T D W Q I I C E I A T R M G Y P M H Y N N T Q Q  
UniRef90\_B7A8B3 Y L S W N E P L A E P E G E A R P N T W V F R E L A K R L G L K E P T L F W S A  
UniRef90\_M1MFV0 R I S A M R P A L E K T E D E A R S D Y E V I Y G L A K R L G M G S L L D K W K T  
UniRef90\_G8N4D5 R V N V L R K A V D P P F G L P S D L E L L I E F S R R M G F R D R S G R P L I  
UniRef90\_M1PJT4 R T A H F D R I V P P G G D T M S D T W Q L I E V A R R L G F G K Q F W S E D  
UniRef90\_R9CBZ5 R I S K I Q P V I P K K E N E L S D Y D I M L G I E A L G M G K L L E K W R T  
UniRef90\_G8PIR2 R T Q F W Q L V N A P G E A K S D L W Q T V E F S K R F K V E D V W P E E L L  
UniRef90\_MOLTB2 R V Q R M R G L G R V H E N T K S H D L E I L S E I G S R L F D P V D F D F D G P  
UniRef90\_UPI00035ECC72 T V H L S E K A V D P P G E A R S D L D I F L D Y S R M D F R T R S G A P L L  
UniRef90\_S6AB21 R T Q F W R Q Q V K A Q G D A K S D L W Q V M E F S K R F K V E D V W P H P N S  
UniRef90\_UPI00036B031B Y L A L R M P A T Q P K Y N S K P D W W I A K K L A E K M G L G A Y F G W K N I  
UniRef90\_UPI000403E64C R T Q V W H Q Q V K A P E G A K S D L W Q M M E F A K R F K I E V W S E D L I  
UniRef90\_Q5V6J3 R V M R M R P N A D L P G E A R R D L D I L T G L G Q R L V G Q S D A F D Y D G  
UniRef90\_UPI00047C0C73 Y V N Y G P K L V D A P G E A K S D L W I W T Q L A E R L G F G E E F H L T R D  
UniRef90\_D7AZ68 T V H L S D K A V E P P G E A R S D L D I F L D Y A R R M D F R D N D G A F P  
UniRef90\_X6L5X5  
UniRef90\_Q39TH0 F V C G E Q A V E P L F E R R N D Y E L W K G L G K R L G Q  
UniRef90\_W1SA16 Y V N Y G G P K L V S A P A P G E A Q P D L W I W T E L A K R L G F G D D F N F S R D  
UniRef90\_A8UQX8 T I T F C E K F S E P Y G E S K P D W L I F T E L A K V M G A E H L F P Y S S  
UniRef90\_UPI0003B57A74 R I S R Q R A L F A P P G M A R A D W A L T A D V A R R L G H G G A F A W N S S  
UniRef90\_F7RU77 R I S R Q R A F K A P L G E A R A D W Q M V C D V A S A M G P G F D Y P N A A  
UniRef90\_A6D832 S L Q W R D Q V I E P L F D S K P D H E I M Y L L T K K L G F E Q Q L F K N E N  
UniRef90\_Q30SD2 S A Q W R S K V V E P L Y E A R A D H E I L F D F A K R M G F Y N Q Y I A G M D  
UniRef90\_E2EA35 N V Q R L R K A L E P T G D V K E D W E I I S L V S T A M G Y P M H Y K N Q E E  
UniRef90\_UPI00037C0B6A T V H L S H K A I E P P G E A R S D L D I F I D Y A K R M D F R D K D G D P L I  
UniRef90\_E1SNX9 S L Q W R S Q V V E P M F E S K P D H E I M Y L I E A K K L G F A D Q M F K N I E  
UniRef90\_B0A733 G F Q R I R K A V E P K G D V K T D W Q I I C E V S T A M G Y P M H Y N N T K E  
UniRef90\_UPI0004727C16  
UniRef90\_UPI0003B60CE6 W R Q G D R P A P G Q A K H D W E I L S L I A A R L G K E K W F S Y R S A  
UniRef90\_S4XXD0 R V I K I N K A V D C P G E A R R D W V V I Q D L A R A L G R P K G F T F S P  
UniRef90\_V9VXK3 R T Q F W H Q L V N A P G E A M S D L W Q L A E F S K R F L F E V L Y A N G K V  
UniRef90\_D8JXA9 Y M T Y N Q K A V E P P G E C K P T S E V W R L L A K E M G F D D P V F K M T D  
UniRef90\_W1JK38  
UniRef90\_UPI0003B4D4E8  
UniRef90\_V2BJ84 W L S I N Q P A I K P M Y E A K C D L E I A T M L S R T I N K M C T F P Q E F D  
UniRef90\_UPI00036663D7 R V I T L R E A S K R T P G K A R H D W R I L A D I A K Q L G K G E F F S F S S A  
UniRef90\_G9Y896 G F Q R F Y K A V E P E G D V K R D W E I I S L M S T A M G Y P M H Y N N T Q E  
UniRef90\_E2DDC6 G F Q R I R K A L E P E G N I L D D W D I I C R V S T A M G Y P M H Y N T E  
UniRef90\_UPI0003774017 F I R L H K K V L E P Y A Q S R P D W E I I F T I A Q K L G F K H F P W Q S V  
UniRef90\_F8AE19 Y V A L N E P V T K A Y G K S N S E V T K L L A R A L G I D N P Y L Y E E D



UniRef90\_UPI00037AD92D H P D G L T L Q K P E F E K Y R Q H G F N T P S G K V E F Y S E T L S D Y G Y E 570 580 590 600

UniRef90\_UPI00036D0DB9 Q H R S P L R Y L D A R G R R P A L A F P T A S S G K

UniRef90\_E6W1W4 S L D H P G T Y K R Y V K G M D P H K A G T P S G K A N I F V R P Y Q E A A E M

UniRef90\_B0G5V4 I A E V T P Y V P M Q D L K K G L K T P T G K F E L K S A L I E Q H P E W

UniRef90\_A8H719 F V N T P N A K A V D E D G T Y A S F K T P T G K I E L S S A K V E K M A

UniRef90\_R7PM17 K R T Y R K Y E T G G L R A D G R K G F P T P S G K F E L S S T V L E D M G Y T

UniRef90\_J1ER37 E G Q P S S G K C E F Y S A R L A A Q G L D

UniRef90\_D5AQH0 E K A P E G S P I M H V E G F V R S G K G R F I R T A Y L P T D E K

UniRef90\_K0F0B3 D G T R P R N P L R Y V N D G V S Q H F A T P S R R A V F W P R P H L P A A E L

UniRef90\_E8LU42 E Y A A W Q P V Q W G G A H P F A N G F S F D D G K A R F

UniRef90\_F5SUW1 T K D D R A P H R E G N F P T P S G K C E L

UniRef90\_UPI000468B902 F V A A Y P N A R A M D E D G T Y G K F K T P S G K I E L T S A K V E G M A

UniRef90\_UPI000370CE88 E Q Y P E G H H Q L Y S D L Q F G H D L L T A N G R A I L K P A E F E P H M E V

UniRef90\_J71VW5 A G R P V E L S L P Q D Y K T T Y L T P S G K I E L Y S S V E A E

UniRef90\_V6T8C6 E E L T L G E M P K L K T P S G K I E F Y S E T Y K E A G F K

UniRef90\_R4SJA2 A E S H P G T P R M F L D S F A H P D G R A R F V P V D H L G P A E P

UniRef90\_UPI0003B5D45E A L Q E S I I H Q R L F S D N L F F T D S K K A Q F I A V N H Q P L

UniRef90\_UPI0004715479 P S R R Y E E K G F P T D G K V E L R L S A A E K F K L D

UniRef90\_D9V717 G E T H P G T P R M F L D G F A H P D G R A R F A G V D H S G P A E L

UniRef90\_UPI0003FF00A4 E L Q T D N V H Q R L F A D K Q F F T P S K K V Q F I A

UniRef90\_A3SJR7 H T F D R T T L R A N P A D G D F Y G L P W P

UniRef90\_UPI000376129F R D G V Y Y N P S K V Y G L Y D G K I Y K T S S H K I D L F N E R Y E Q M G V A

UniRef90\_UPI000375BBF2 E E N P D G T E R I Y A D G K F W A H P E Y C E T Y G R D

UniRef90\_UPI00045E73C0 E G D K L T S N E R R L F E D G Q F F T P N K K A K I L F E N I S E N P V K

UniRef90\_N9Y1J9 L A P F A N G G F P T E S G R C E L V C E R L S A I G Q D

UniRef90\_V4YKM4 R R G D S T P R L F H D R R F F H A D A R A R L V P T P P R A P A N A

UniRef90\_A0A031MDV5 K P F T P F A D G F P T R S G R M R F P R P G E A

UniRef90\_UPI00039C283E D E K Y F T N Y A D F R A D P E K N A L K T P S G K I E L Y S E A V E K L G Y P

UniRef90\_M3IKM8 I N D D G I N Q Q R L F S D G I F P T Q D G K A C F I A T P Y R P A L T H

UniRef90\_W9A0D5 K P V Y L E D F Q D Y K F K T P S G K I E M I S Q K L E D N G I P

UniRef90\_UPI0003B35EAD L N D G R S R A L V T H E D G T T P R F A T P D G R A V F H A R P H V G P A E L

UniRef90\_UPI0003813F52 N G S F P T P T G K A R M Y P

UniRef90\_D3SMG9 D D R P E G T V R L Y E D D Q F T G R P L T A D G R A I L H A T R Y N P P S E Q

UniRef90\_UPI00037B5DF8 Y P Q N D E V L Y R E K F L T E D G K A H F H P

UniRef90\_F4B860 P E G L R L P L R T V H R K Y E Q R G F R T P S G V V E L Y S E T L L R Q G Y P

UniRef90\_D8HQV3 Q L K Y Q K Y K T G E L R Q D G K P G F P T P S G K F E I S S V H I E E C G Y E

UniRef90\_S2Y9A3 A A R P P G I S R Y A D E L K K G F A T L S G K I E F Y S E G L K E L G L H

UniRef90\_W1B2Q1 I P G F N T V T G K V E L C S T L F E W G L D

UniRef90\_F7UWH3 D G E P G T P S G K I E L Y S E R A Q V L G L S

UniRef90\_T0IQN9 D H K P F D R T T L R A R G G P N D G D Y Y G L P W P S

UniRef90\_W0EC05 A E D T F L H G R L W A A D P A E R G R P A P

UniRef90\_Q0G143 P G D N Y G Y I A Q F R Q D P E A N P L A T A T G K L E I Y S E A L Q E Y G F T

UniRef90\_R1FG86 E A D H P G T G R L F E H S F A H P D H R A E L T P N E P A V P K E K

UniRef90\_D6XU80 G Y T Y R K Y E K G L L R F D G E P G F N T V T G Q V E L Y S T L F E A W G E D

UniRef90\_S6FBX6 Y A D G K A R M I A V E Q I M P W E V

UniRef90\_UPI00036B751C D E N P F L H G R L W E K D P A K R G R L A P F G I V E

UniRef90\_I3REZ8 E G E A L E D D E R R L Y E D G N F F T P S R K A Q F K F E A P M E N P L P

UniRef90\_F8BLG0 G L D P L A D E H A V D E K P Y F Y G P A K D H K L W I W L R P Y K G A A E E

UniRef90\_N9X2X7 F Y L T D K A K Y G M R K P G A R Y K T R T G K I E L Y N V K Y E K G L D

UniRef90\_UPI0003B740F1 S E S D D D Q G T D Y L F E K T F S T P N G L G Q F F T C D W A P P L D R

UniRef90\_F8AE26 K P F P F A Q K V R F S P P L V I P T E

UniRef90\_UPI0003B625C5 E G E I L K D D F R R L F E D N K Y Y T P S K K A K F I F E E V R E N P L P

UniRef90\_UPI0004219AAC E Q Y P E G K K R L Y T D N V F P T A V D E A E S Y G R D M R

UniRef90\_B7A8B3 N G K E T R W R F N T Q H D P A C K P Y G R K D G K A W I W A R P Y E P A A E S

UniRef90\_M1MFV0 K G E K L D S K E R R L F E D K K F Y T P S K K A K F I Y E D I S E M P Y E

UniRef90\_G8N4D5 N G K E T Q W R F R E G S D P Y V G K Y G H K D G K A R I F A L P Y E A P P E M

UniRef90\_M1PJT4 E P G D E G D P Y L Y A D E F D T E N G L G R I E G V S H Q P P E E T

UniRef90\_R9CBZ5 E D H P D G T V R L Y R D G V F G H D L T T P G G R A I F K T A P Y Q G S H E T

UniRef90\_G8PIR2 D N K E T L W R F R E G Y D P Y V K K Y G K P D G K A V I F A L P Y E P P A E S

UniRef90\_MOLTB2 F D D L Y F I R G Q E I E F N T N T G K I E L F S T E L Q A E G F D

UniRef90\_UPI00035ECC72 N G K E T Q W R F R E G S D P Y V E K Y G H A D K K A V I F A L P Y E P P A E S

UniRef90\_S6AB21 M L P W Q D R K F K T P S G K F E F T S T

UniRef90\_UPI00036B031B D Q N P D G T E R L Y A D G R F W A A P D Q C E S Y G R D

UniRef90\_UPI000403E64C K I P W H N Y Q A P R L M H K K H E Q Q G F A T P S G K V E L L P T M F E R A G I E

UniRef90\_Q5V6J3 K I V P V R P A Q M H F D P A F P L R L N T P S G R A R F H P A F F

UniRef90\_UPI00047C0C73 T Q Q L T H S R L Y S D G Q F S F A D G R A R F V

UniRef90\_D7AZ68 K T S L E A E G G P I N G E T Y G L P W P T E M K

UniRef90\_X6L5X5 T R D I N D I G T K Y L Y K G A V F S T P D G K G K F I A A E Y E P V K E K

UniRef90\_Q39TH0 E Q F P D G T P H L Y T T H L F N T S L D T P K G K A F L K G T D Y Q Q P Y E I

UniRef90\_W1SAI6 W E D L Q A K G G P C K G E T Y G L P W P

UniRef90\_A8UQX8 D E S D A D L G T M Y L H K Y G I F A T P D H K G Q L F A A E W R P P Y E V

UniRef90\_UPI0003B57A74 K I V P V R P A Q M H F D P A F P L R L N T P S G R A R F H P A F F

UniRef90\_F7RU77 T Q Q L T H S R L Y S D G Q F S F A D G R A R F V

UniRef90\_A6D832 K T S L E A E G G P I N G E T Y G L P W P T E M K

UniRef90\_Q30SD2 T R D I N D I G T K Y L Y K G A V F S T P D G K G K F I A A E Y E P V K E K

UniRef90\_E2EA35 E Q F P D G T P H L Y T T H L F N T S L D T P K G K A F L K G T D Y Q Q P Y E I

UniRef90\_UPI00037C0B6A W E D L Q A K G G P C K G E T Y G L P W P

UniRef90\_E1SNX9 D E S D A D L G T M Y L H K Y G I F A T P D H K G Q L F A A E W R P P Y E V

UniRef90\_B0A733 S P E E K G R Q R L F D E S F V H D S G R A R C F T P E H G E

UniRef90\_UPI0004727C16 S E D P R T G A P A P D H Q G G A G R F Y F P D G K A R F N V A D Y R V P V D D

UniRef90\_UPI0003B60CE6 N G Q E T R W R F K E G S D P Y V T P Y G K P D G K A V I F A L P Y E P P A E S

UniRef90\_S4XXD0 N A D T R I P H A E G H F P T P S G K V E F

UniRef90\_V9VXK3

UniRef90\_D8JXA9

UniRef90\_W1JK38

UniRef90\_UPI0003B4D4E8 T I A S S K R R Q A S M N L N L N W R R K T A T P R C R

UniRef90\_V2BJ84 A E G T A D E K Q M F T E Q F A T A D G K A E L F Y N P A A T H E E E

UniRef90\_UPI00036663D7 T L D S P G T S Y L Y E G N F D T P N G K G Q F Y T C E W R P P I D K

UniRef90\_G9Y896 D K G P E D K G T M F L H A G G K F A T A D G I G I F K T S P Y Q E P A E V

UniRef90\_E2DDC6 K P E G I T E Q T R Y K Y L T E G F K T P T G K V E I E S T L L N K Y G Y E

UniRef90\_UPI0003774017 L K E S G R W E T P S G K I E F Y S K R A I E R G L S

UniRef90\_F8AE19

UniRef90\_UPI00037AD92D P  P  
 UniRef90\_UPI00036D0DB9  
 UniRef90\_E6W1W4 P D R E Y P F F F  
 UniRef90\_B0G5V4 G  L  D A  L  P T Y K E P  
 UniRef90\_A8H719  
 UniRef90\_R7PM17 G Y P  V  Y  
 UniRef90\_J1ER37 G  L  P D H  
 UniRef90\_D5AQH0 T G P R F P  
 UniRef90\_K0F0B3 P D D D Y P F  
 UniRef90\_E8LU42  
 UniRef90\_F5SUW1  
 UniRef90\_UPI000468B902  
 UniRef90\_UPI000370CE88 P D E D Y P M W   
 UniRef90\_J71VW5 P  L  P R Y F D P  
 UniRef90\_V6T8C6 P  L  V  E W  L  E P  
 UniRef90\_R4SJA2 P D A E F P  
 UniRef90\_UPI0003B5D45E  
 UniRef90\_UPI0004715479 P  L  P  V  F  
 UniRef90\_D9V717 P D E A F P  
 UniRef90\_UPI0003FF00A4  
 UniRef90\_A3SJR7  
 UniRef90\_UPI000376129F P  L  P A Y N P P A  
 UniRef90\_UPI000375BBF2 L I T G A P  V E P S  
 UniRef90\_UPI00045E73C0 P  L  P D Y  V  P P R E T A  
 UniRef90\_N9Y1J9 E T E E Y P  
 UniRef90\_V4YKM4 P  V  P D Y  V  P N Y E  
 UniRef90\_A0A031MDV5 P D D E F P  
 UniRef90\_UPI00039C283E Y  V  P S H A T  
 UniRef90\_M3IKM8 D  C  P P H A T W M E P  
 UniRef90\_W9A0D5 H S T A Y P  
 UniRef90\_UPI0003B35EAD S  L  K P Y E S P K K P  
 UniRef90\_UPI0003813F52 P D A E H P F  
 UniRef90\_D3SMG9  
 UniRef90\_UPI00037B5DF8 P G G D F P M W   
 UniRef90\_F4B860  
 UniRef90\_D8HQV3 P  L P  V  Y D E P S  
 UniRef90\_S2Y9A3 G Y P R Y  
 UniRef90\_W1B2Q1  
 UniRef90\_F7UWH3 P  V  V  E Y  
 UniRef90\_T0IQN9 P  L  P Y Y P P Y S P  
 UniRef90\_W0EC05 P  V  P T Y  L  P  L  V  E  
 UniRef90\_Q0G143  
 UniRef90\_R1FG86  
 UniRef90\_D6XU80 E  D  P  P T Y  
 UniRef90\_S6FBX6 P S A G Y P  L  Y  L  
 UniRef90\_UPI00036B751C P  L  P Y F P R W S P  
 UniRef90\_I3REZ8 P N G E Y P  
 UniRef90\_F8BLG0  
 UniRef90\_N9X2X7  L T E E Y P  
 UniRef90\_UPI0003B740F1 K K D E Y P K Y  V  P P  
 UniRef90\_F8AE26 P D A E Y P F Y  L  
 UniRef90\_UPI0003B625C5 P  L  P  V  Y R R P R Q P  
 UniRef90\_UPI0004219AAC I N E E Y P  
 UniRef90\_B7A8B3 P  L  P G Y P  L  I  L  P P A  
 UniRef90\_M1MFV0 T T K E F  
 UniRef90\_G8N4D5  
 UniRef90\_M1PJT4 P D N E Y N F W   
 UniRef90\_R9CBZ5 Q N K E Y P  
 UniRef90\_G8PIR2 P D E E Y D F W   
 UniRef90\_MOLTB2 P D D E Y P  
 UniRef90\_UPI00035ECC72 P R Q E Y P F  
 UniRef90\_S6AB21 P D K E Y D M W   
 UniRef90\_UPI00036B031B P  L  P K Y T  L  H  P E P  
 UniRef90\_UPI000403E64C P D E E Y D  L  W  L  
 UniRef90\_Q5V6J3  
 UniRef90\_UPI00047C0C73  
 UniRef90\_D7AZ68  L  V  T G A P  L  E P  
 UniRef90\_X6L5X5  
 UniRef90\_Q39TH0 A  L  P  V  Y P P Y S T P  
 UniRef90\_W1SAI6  
 UniRef90\_A8UQX8  
 UniRef90\_UPI0003B57A74 P  
 UniRef90\_F7RU77  
 UniRef90\_A6D832  
 UniRef90\_Q30SD2  
 UniRef90\_E2EA35 E N  V  E Y P  
 UniRef90\_UPI00037C0B6A P D D  L  Y P  L  W  L  
 UniRef90\_E1SNX9  
 UniRef90\_B0A733 E D E E Y P F  
 UniRef90\_UPI0004727C16  
 UniRef90\_UPI0003B60CE6  
 UniRef90\_S4XXD0  V  S D E Y P  L  F  L  
 UniRef90\_V9VXK3 P D D E Y P M W  L  
 UniRef90\_D8JXA9  
 UniRef90\_W1JK38  
 UniRef90\_UPI0003B4D4E8  
 UniRef90\_V2BJ84  
 UniRef90\_UPI00036663D7 T D D A Y P  L  Y  L  
 UniRef90\_G9Y896  V  S D E F P M  
 UniRef90\_E2DDC6 E N K A F P  
 UniRef90\_UPI0003774017 A  L  P  
 UniRef90\_F8AEI9 P F P E Y K P P



1 10 20 30 40  
UniRef90\_UPI0003F63F17 S T H W S G P G C H D G C L L L Y Y T K D G K L I K V E G D L D N P Y N M G R L C  
UniRef90\_G9XU05  
UniRef90\_T0IWZ6  
UniRef90\_UPI00037D72D4 S I C P Y C G V G C L L L D V E G G K V V R V I P N R N H V L S K G K V C  
UniRef90\_I0H3D9 A Y R T C L C E A A C G L E L T V T D D D Q V V A A R G D R E H V F S H G F I C C  
UniRef90\_R4X184 F C G T G C G V L V G V K G N Q V V A T Q A D P Q A E V N R K G L N C C  
UniRef90\_K9GZB5 D K G V C R F C G T G C V L I G T K D D R I V A T Q G D P D A P V N R K G L N C C  
UniRef90\_A4EXJ0 T V C P L C P T C S L N A T I S N G K V T A V K G S A A N P F T N G V I C C  
UniRef90\_UPI0003FCBA32 H T Q C P F C S M Q C K K K V L R A E K Q G A R S V K Y R T Q D P T T K G R I C C  
UniRef90\_W7SVV2 D T T I A T A C Q F C N L H V G L R A E R I I S V Q G E Q Q D P V I Q R G N I C C  
UniRef90\_R4LKN0 C V L C S N G C G C D I A V K D G R M V G V R G R V T D V V N H G R L Y  
UniRef90\_B8DL D3 C T R D C P N S C G L V A T V R D D G R L V R L A G D P D H P L T R G K A C C  
UniRef90\_I0LC12 K S I C T H C A V G C V T A E V L N G V W V G Q E P S W D S P I N R G S H C  
UniRef90\_W1JRT3  
UniRef90\_D7C0X4  
UniRef90\_Q65NC5 C P F C S M Q C K M Q L I E Q T I V T R K K Y T K D N P T T K G R L C C  
UniRef90\_Q07WV3 V N C G S N C P V K V F S S D G I I T R V E A D D E Y G V N C A R G R  
UniRef90\_C8PYN5 T T C A Y C G V G C G V L A T I D E N T Q H V S I D G D P T H P A N F G K L C C  
UniRef90\_U1PHV0 T T C M R C A V G C G Y L Q T E A D D E H I V D V S G D P D H P T N H G C Q R  
UniRef90\_X1FP41  
UniRef90\_E1SB11 C P Y C G V G C V C V T S Q G N H Q A T V I G D P H H P A N A G R L C C  
UniRef90\_H1FSA1 K T I C T A C S V G C I I A E V Q N G V W V R Q E V I A Q D H P I S C C K G A  
UniRef90\_D0CVM2 D K A P C R F C G T G C V L V I G T K E G R V V A T Q G D P D A P V N R G L N C C  
UniRef90\_D4H8U3 E K H I A S S C E M C V F F A H V V D G K I K K L N P N P K F F K S R A M L C C  
UniRef90\_UPI00037A3882 T V V T S C A H N C L V A H K K G D V I V R L S T D D G R Y R A C L R G R  
UniRef90\_Q1Z843  
UniRef90\_U5WTE2  
UniRef90\_G8QFB2 D K G V C R F C G T G C V L V I G T K D G R V V A T Q G D P E A P V N R G L N C C  
UniRef90\_K8ZQZ9 S V N C G S R C A L Q L H V K D D E V V W V E S D T T G D D A C L R R G R  
UniRef90\_B11F3 T V C T E C G I G C V Y F G A R G G R L V S A R Q N L S H K T S K G R L C C  
UniRef90\_UPI000349134F H A A C P H D C P T C A I R V T V A G E Q L I R L Q G E P D H P T T H G A L C C  
UniRef90\_D6SM83  
UniRef90\_R7PHB7 K T I C P Y T S C G L L A E T D G I R L L G V K G D P D H P A A K G L I C C  
UniRef90\_D5V743 S V C T A C S V G C I I A E V Q N G V W V R Q E V I A Q D H P I S C C K G A  
UniRef90\_I3CCR3 R S I C T H C S V G C V I A E V Q N G V W T G Q E P A F D H P F N C A K G A  
UniRef90\_M7CQ42 N G T H F R T C H C G V A I T V K D G R I D S T K G D E N D P L S Q G H I C C  
UniRef90\_L1KHF0 A M D I A V V D D G R M V G V R G R A Q D R V N H G R L E  
UniRef90\_F8D3F8 T T C M R C A V G C G H V I Q R P V E Q G Y G L D V R G D A S H P V N N G L A C C  
UniRef90\_D8F4G9 K T D C G L C N C C G L D V H V E D D R I I K L E G T K E H W L N C P K G E  
UniRef90\_G8TT95  
UniRef90\_F7UYF7 F C G C G C G V I C E V K D N R L V S V T G D P D N N S N R G L N C C  
UniRef90\_E6TJF1 C G M V A T V E D G K L V S L R P D K D H P L S A G F A C C  
UniRef90\_W7IWJ3 C N L C A C C G L E L T V E G G R V E A V R G D S R D P L S R G H L C C  
UniRef90\_UPI00035FOCC4 A F D I A V T D D R I V G V R G R A G D R I N R G R L D  
UniRef90\_UPI00036DF337 V P T H C P Y C A L Q C G M N S G E T V E V V E R D D F P V N R G A L C C C  
UniRef90\_B8K6S8 C T K T A C P Y C G V G C I I A E V Q N G V W V R Q E V I A Q D H P I S C C K G A  
UniRef90\_T0D452 T I K T A C P I D C Y D A T V K E N G E I Q L Q G N P E H P I T R G A L C C C  
UniRef90\_F6AJN3 F C G T G C S V M V A T R D N R V V A T H G D K A E V N R G L N C C  
UniRef90\_B9M850 S A C P Y D C L M V I E I S E G K A V R V S G D P D H P Y T R G L C C  
UniRef90\_UPI0003600670 C P D A C R L R I T L A R G E D G R A V K L T G D T D H P Y T R G F A C C  
UniRef90\_A0EJ3 D K A P C R F C G T G C V L V I G T Q N G R I V A T Q G D P D A P V N R G L N C C  
UniRef90\_D3FYD3 C P F C S M Q C K M Q L I E Q T I V T R K K Y T K D N P T T K G R L C C  
UniRef90\_F4L8R9 R T V C T H C S V G C V D A V V E N G V W V R Q E P V F D S P I N C A K G A  
UniRef90\_J7LFF3 T H C P Y C A L Q C A M R E G P A V R P A P F P T N R G G L C C  
UniRef90\_B8FV01 G W C G F G I G S N A E V D V K D G K I L R I R P L H F D K E A R G K V M  
UniRef90\_UPI00041496CE D K A A C R F C G T G C V L V I G V Q N G K V V A T Q G D P D A P V N R G L N C C  
UniRef90\_I3REZ1 C S I I S E F K E G K L T V K G N P N H P I T R G F L C C  
UniRef90\_K9WCM8 D K A A C R F C S L C R L K V I H V K D G R I I D V L G E P D D P V Q S G K G P  
UniRef90\_UPI0002D77CF6 D K A A C R F C G T G C V L I G T Q N G K V V A T Q G D P E A P V N K G L N C C  
UniRef90\_X8BQS8 E F P T N R G R L C C  
UniRef90\_UPI000405B275 C S I T A H V E G G V V K D L V G D P H P V T R G F L C C  
UniRef90\_F7UVZ3 T C N G C S S K C L V A K T V D G Q L W T V N G N E N H P Y A K G H I C C  
UniRef90\_Q3AA07 C T L N C Y D S C V E V T V E D G R V V K A L G D K N H P L T R G F L C C  
UniRef90\_I4A6Q1 C W H N C G S R C L K A L V V D G V V V R Q K T D T H P D S C L R G R  
UniRef90\_W0EC37 S C G F L V N Y T E E Q G L Q L K G E K E H P I T Q G F I C C  
UniRef90\_M4UPG1  
UniRef90\_U6E9R8 K T V I T T C G A C S I V A S A E N G K V T K L Q G N P Q H D I T A G F L C C  
UniRef90\_Q8U7P1 F C G T G C G V M V I G V K E G K V V A T H G D M Q A E V N R G L N C C  
UniRef90\_K6WLA2 T H C P Y C S L Q C G M R S D R A S S L E V T P R D P T N A G G L C C  
UniRef90\_A1SBQ9 R T I C S H C S V G C I Y A E V Q N G V W T G Q E P A F D H P F N C A K G A  
UniRef90\_M1PCH9 G G I C E M C F W R C L V G K V R D G R L M K L E G N P K S I D N C A R G N  
UniRef90\_K7RN92 I P T I C K V G A L L A N V N D G K L D V K F D P K H P V T A G C G C C  
UniRef90\_S9QDD6 F C G T G C G V M V I G V K K G V V A T H G D M Q H E V N R G L N C C  
UniRef90\_UPI00047B79B0 F C G T G C G V N V A V K N G R V V A T H G D V H A E V N R G I N C C  
UniRef90\_I5BRJ0 H S A C P H D C S T C A L M D V E V K D G R I G R V H G A K D N S Y T A G V I C C  
UniRef90\_Q56350 F C G T G C G V M V I G V K E G R V V A T H G D L L A E V N R G L N C C  
UniRef90\_UPI00037607D5 K T I C G N C A V G C F V A E V E N D T W V S I E P W F E H P I N Q G S L C C  
UniRef90\_W0JTA8 T T C M R C A V G C G H V I Q R A V E T G Y G L D V R G D A S H P V N R G L A C C  
UniRef90\_B9LNQ6 T T C M R C A V G C G H V I Q R A V E T G Y G L D V R G D A S H P V N R G L A C C  
UniRef90\_E1QE75 R T T C P H C G V G C Q Q L H V K D D Q I V K V T A V E D A R P N L I G M L C C  
UniRef90\_UPI00046801A3  
UniRef90\_D7BG58 N R L L Q V E G D P T H P F T Q G F A C  
UniRef90\_UPI0003B3AE7D C I L L C S R N C G L E I T V E N G R F T R I R G D D D H P T S K G Y I C C  
UniRef90\_V6PC80 F C G T G C G V L V I G T Q Q G R V V A C Q G D P D A P V N R G L N C C  
UniRef90\_F4CUS7 A M D I A V V D D G R V V G V R G R A D D R V N R G R L G  
UniRef90\_UPI0002F001ED C Q G C T W C P I Q A V I E D N R V T K V R G N P N S K A N E G N I C C  
UniRef90\_E5Y3B6 K T V Y S V C G M C P V A V I G V E N G E A V W I Q G N P H S A T G C P R G I  
UniRef90\_UPI0004652A99  
UniRef90\_R5FP01 T H S C F F A C G G R C V R S F V C D G K V L F Q D T D S L H A D S C A R G R  
UniRef90\_K0EYK0 A R Q C T L C E A H C G I L V I T E N E R V T R I E G N P D D V L S Q G Y I C C  
UniRef90\_K8CVE0 S V C P Y C G A G C L K L V V D N N K I V R A E A E G S V T N Q N Q L C C  
UniRef90\_A9FEA4 R F C G T G C H V I Q V I G V R G G R V V A V I A G D Q S A D V N K G L C C

UniRef90\_UPI0003F63F17 [K W Q A N S S R D R L T R P R L I 50 60 70 80 R E N G V L V E  
UniRef90\_G9XU05 M R C E A Y H S P Q R L K W P L K R V G E R G E N K W E R  
UniRef90\_T0IWZ6  
UniRef90\_UPI00037D72D4 G K H K S L Y L P S R L T K P L L K R V G G S F V E  
UniRef90\_I0H3D9 P K G A T F S D P D R L R R P L V R R D G R H V E  
UniRef90\_R4X184 V K G Y F L Y G K D R L T T P L L M R M K N G Q F D K N G E F A P  
UniRef90\_K9GZB5 I K G Y F L Y G K D R L T T Q P M L R K S G G V Y D K E G D F E P  
UniRef90\_A4EXJ0 N Y P D F V H G E T R L H T P L K R T G P R G S G A F T P  
UniRef90\_UPI0003FCBA32 V K G K N A Y H P E R I T T P L I K V N G A F Q E  
UniRef90\_U7SVV2 V K A P M V Y N P L R L R T P L I R T G G A K G S T D S T F E P  
UniRef90\_R4LKN0 G S T P W A R S A D R L T R P L V R Q G G R L V E  
UniRef90\_B8DL3 V K A Q R V Y S P E R I T H P L L R D H R H Q P W R  
UniRef90\_I0LC12 Q K G W T L D H P D R L T T P L L R D P V T G E L R P  
UniRef90\_W1JRT3 A K G A S V H S D R R L R Y P M K L V R N G Q W T R  
UniRef90\_D7C0X4 R L T H P L V R D P A S G E L R R  
UniRef90\_Q65NC5 M K G M N A H H S E R I T H P L I K K N G E F V R  
UniRef90\_Q07WV3 S L R Q R T Y A A D R L K T P M K R V G K R G E G K F V P  
UniRef90\_C8PYN5 S K G K A L G D D R R L A H P M J H G E P  
UniRef90\_U1PHV0 G V N E T V N S A G R V T Q P L I R R G S L Q P  
UniRef90\_X1FP41  
UniRef90\_E1SB11 A L G E T L T P Q G R L L T A Q V N G Q P  
UniRef90\_H1FSA1 D M I D M V R S E V R L K H P M V K E G G K W K R  
UniRef90\_D0CVM2 I K G Y F L Y G K D R L T T P L L R K S N G V Y D K N G E F E P  
UniRef90\_D4H8U3 A R G N A G Y N H E R L T T P L V R V G E R G E G K W K K  
UniRef90\_UPI00037A3882 S Y R S R L Y S Q E R L L Y P M L R V G E R G E G K F K R  
UniRef90\_Q1Z843  
UniRef90\_U5WTE2 P K W Q A N A S P D R L T T P L I R R D G G L R P  
UniRef90\_G8QFB2 I K G Y F L Y G K D R L T T P L L R M K N G Q Y D K N G D F T P  
UniRef90\_K8ZQZ9 S L R R R I N H P D R L N Y P M K R V G K R G E G K F F E R  
UniRef90\_B11F3 G K G R F L N H P D R L K T P L I K K D G Q F V E  
UniRef90\_UPI000349134F T K V S R Y A H P E R V L Q P L R R V G P K G S G Q F E P  
UniRef90\_D6SM83  
UniRef90\_R7PHB7 R K M R H V H S P E R I L L P M K R V G A K G E G R F E P  
UniRef90\_D5V743 I K F D F V D S D K R V K K S F I D N N F L E L P R E L K A R V R T D E T Y E  
UniRef90\_I3CCR3 S V R E H G H G D H R L K Y P M K L V A G K W Q R  
UniRef90\_M7CQ42 P K A T A L E D P D R L R R P I R K T G D G W Q E  
UniRef90\_L1KHF0 P K W Q A G T S A D R L T R P L V R Q D G R L V E  
UniRef90\_F8D3F8 Q R G V T T A D P D W L A R P L V R R D G D L V P  
UniRef90\_D8F4G9 H L M D W V Y S P N R L K Y P M K K V N G R F Q R  
UniRef90\_G8TT95 R R E R L T V P L I R E N G R L R P  
UniRef90\_F7UYF7 V K G Y Y L Y G E D R L T K P L I R D D S S T K G T D E G L R E  
UniRef90\_E6TJF1 Q K G I A V N D P D R L T T P M R R T P D G F E P  
UniRef90\_W1WJ3 P K A V A L P D V H A D G E R L R T P V R R T A D G W E A  
UniRef90\_UPI00035FOCC4 P K W Q A T A S P D R L T T P L I Q R V D G R L V P  
UniRef90\_UPI00036DF337 G K G R T L S S R V R L L T G P L V R R P A T G R L E E  
UniRef90\_B8K6S8 A L A Q S L D M P S R R L L Y P K L N G G E W V P  
UniRef90\_T0D452 N R G R R L D G E D R V V Y P L K K V G G E V F Q P  
UniRef90\_F6AJN3 V K G Y F L Y G V D R L T T P L L R M K N G V Y D K Q G E F T P  
UniRef90\_B9M850 H Y E Q T V H S P L R L T P L K R S G A K G S G N F T P  
UniRef90\_UPI0003600670 V K T V H Y P A R Q N H P E R P L Y P L R R V N P K T D P D P I F E R  
UniRef90\_A0EJ3 I K G Y F L Y G K D R L Q T P L L R M T D G K Y D K E G E F T P  
UniRef90\_D3FYD3 I K G L H A H H K D R I R N P L L N V D G E F Q E  
UniRef90\_F4L8R9 S V R E H G H G E H R L R Y P M K L V N G K Y Q R  
UniRef90\_J7LFF3 R K G W T L T V P D R L T R P L L R R K D R D S D P V E  
UniRef90\_B8FV01 A Y K K R V Y S P N R I P Y P L K R V D W D P E G E R N P Q N R G K S F V R  
UniRef90\_UPI00041496CE I K G Y F L Y G E D R L T Q P L L R M K G G K Y D K N G E F T P  
UniRef90\_I3REZ1 P K P K W F H S R D R L K A P L V L E G K R G S R E F K Q  
UniRef90\_K9WCM8 M M T Q L V Y N R F R L K S P M K R V S G E K G S P D S K F E P  
UniRef90\_UPI0002D77CF6 I K G Y F L Y G K D R L E T P L L R M K D G K Y D K D G D F A P  
UniRef90\_X8BQS8 Q K G W S L T H T D R L L Q P L V R R G G Q L R E  
UniRef90\_UPI000405B275 N K G R R L Y H P D R V L H P K K V A G S W T R  
UniRef90\_F7UVZ3 G R G H G L Y S D E R V T E P L R K E D G S F E P  
UniRef90\_Q3AA07 P K F K R T Y S P D R L T Q P L L K E K S S F R K  
UniRef90\_I4A6Q1 S Q R Q Q V F G A D R L K Y P M R R K N W A P G G G Q K E L R G Q D E W V R  
UniRef90\_W0EC37 S K G Q A L A S P D R L R F P L R K E K G R F K R  
UniRef90\_M4UPG1  
UniRef90\_U6E9R8 K L E N Y F Y N D K R I L H P L L K V D G N W E R  
UniRef90\_Q8U7P1 I K G Y F L Y G K D R L E T P L L R K K N G V Y A K D G E F E P  
UniRef90\_K6WLA2 A K G W T L D V P D R L T T P L L R G P D G A L H P  
UniRef90\_A1SBQ9 A K G A S L H G E K R L K Y P M K L E G G K W K K  
UniRef90\_M1PCH9 A G V K L L Y D V D R L K Y P M K N V G K R G A P K W K R  
UniRef90\_K7RN92 I K G K H V N D P D R L L Y P Q K K L G D S W Q  
UniRef90\_S9QDD6 V K G Y F L Y G E D R L T T P L L M R K T N G E F D K N G E F E P  
UniRef90\_UPI00047B79B0 V K G Y F L Y G T D R L T T P L L R K T N G A Y D K N G Q F T P  
UniRef90\_I5BRJ0 A Y A E R I H H P D R L L K P L V R S G A K G E G Q W K E  
UniRef90\_Q56350 V K G Y F L Y G A D R L T Q P L L R K K D G V Y A K D G E F T P  
UniRef90\_UPI00037607D5 S K G E H V I S E K R L K Y P M K L E G G K W K R  
UniRef90\_W0JTA8 Q R G V S T A D P D W L T R P L V R R D G E L V P  
UniRef90\_B9LNQ6 Q R G V S E T A D D W L T R P L V R D E G T L V P  
UniRef90\_E1QE75 V K G R F G H D A E R L T T P L I K E N G G F R Q  
UniRef90\_UPI00046801A3  
UniRef90\_D7BG58 V K T Y R Y H H P E R P L Y P M R R A G P K G S G R F E R  
UniRef90\_UPI0003B3AE7D Q K A H Y Q N H D D R L T H P L K R Q P D G R F T K  
UniRef90\_V6PC80 I K G Y F L Y G K D R L T Q P L L R M K N G K Y D K E G E F T P  
UniRef90\_F4CUS7 P K D L Y A W S A D R L T R P L V R D G D R L V E  
UniRef90\_UPI0002F001ED P R P H Q M Y D P D R L K V P L K R T N P K K G R N E D P Q F V P  
UniRef90\_E5Y3B6 A A L A L E K D S E R P Q S P L M R V G A R G G H K W R A  
UniRef90\_UPI0004652A99  
UniRef90\_R5FP01 S L R H A I F S K D R L T H P L K R K H W S V G G G N K G L R G C D E W E E  
UniRef90\_K0EYK0 P K A T A M H D P D R L R T P V K R V G S R F E A  
UniRef90\_K8CVE0 L K G Y Y G W D F L N D T Q L L T P R L T Q P M I R Y Q K G G A F Q V  
UniRef90\_A9FEA4 V K G Y H L Y G R D R L T K P L L R R N G K L E P

UniRef90\_UPI0003F63F17 C S W D A A M E R I V S R S R E L L A E R G P S S I G F Y T S G Q L F L E E Y Y 90 100 110 120  
UniRef90\_G9XU05 I S W D E A Y D I I V E K V R T L Q K E F G P E T I V G M E G T G R N I I W Q V  
UniRef90\_T0IWZ6  
UniRef90\_UPI00037D72D4 V S W D E A L N E I A D K I K E I R E R Y G G K A I A I Y G G C Q N T L E E V Y  
UniRef90\_I0H3D9 V S W D E A F A A V E A G L R P I I E G Y G R N A L A V Y L G N P N  
UniRef90\_R4X184 V S W D T A F D V M A E K H F K R V L K D K G P T A V I G M F G S G Q W T V W E G Y  
UniRef90\_K9GZB5 V S W D E A F D I M A E K W K Q A L K D K G P T A I G M F G S G Q W T V W E G Y  
UniRef90\_A4EXJ0 I S W D E A I E V V Y H G F R N A I D R Y G P E S I L P F N Y A G P H G E L  
UniRef90\_UPI0003FCBA32 A D W E A L S V I Q K N L S H L Q Q G A H G P N S V S L Y G G G S L P R G V I G S  
UniRef90\_U7SVV2 A T W D Q A L D V I A K R M L Q L R D A G R V A A I A N R T T G R L P R G V I G S  
UniRef90\_R4LKN0 T D W D T A M G R V V E V S K R L L A D R G P L T H G F Y T S G Q L F L E E Y Y  
UniRef90\_B8DL03 A T W D E A L D R I A A R M A A I R D E S G R T E A I L Y Y Q G Y G E R T A L  
UniRef90\_I0LC12 A T W D A A L D R V A S G L R A I Q D S S G R D A V A V F G G G L T N E K A Y  
UniRef90\_W1JRT3 V S W D T A V N E L G D K L L Q V R E K S G S D S V Y W L G S A K M T N E G S Y  
UniRef90\_D7C0X4 A T W E Q A L D R A A A G F A A T A T G A Y G A D A F G M F S C S R A T N E M N Y  
UniRef90\_Q65NC5 V S W E E A L Q Y I K E Q V T A I Q H E G R D A L S V Y G S A S I T N E E A Y  
UniRef90\_Q07WV3 I S W D E A A S T I A S E L Q R I A N E Y S N K S I L K I Y G T G A Y Y G F S S  
UniRef90\_C8PYN5 V D W D T A T D F V A K S L Q Q L I D E Y S G A D S V M L Y V S G Q L L T E D Y Y  
UniRef90\_U1PHV0 T T W D T V L G V T A T R L I E A V R Q S P D N V A V L G S G Q Q T N E A A Y  
UniRef90\_X1FP41  
UniRef90\_E1SB11 V S L D A A L D A A A A K L R A V L D Q H G P Q A V A F Y G S G Q L L T E D Y Y  
UniRef90\_H1FSA1 L S W D D A L D R I A T K L K A S H E T A G P D S A M F L G S A K M S T E Q A Y  
UniRef90\_D0CVM2 V S W D E A F D V M A E K W K E A L A K K G P T S V G M F G S G Q W T V W E G Y  
UniRef90\_D4H8U3 I S Y E E A F K M L A E K L A E H K V K N Q N R S S V L F A S S E G F Q E H M F  
UniRef90\_UPI00037A3882 A S W D T A L D F V A G K M E E L K A K Y G P T A L L D Q S Y A G A S Y G V L H  
UniRef90\_Q1Z843  
UniRef90\_U5WTE2 C D W D T A M N A L M A Q R S R E L L D S H G P S A I G F Y T S G Q L F L E E  
UniRef90\_G8QFB2 I S W D Q A Y D I L M A E K C K A A L K A G G P S R N I A F Y T S G Q W T V W E G Y  
UniRef90\_K8ZQZ9 I T W Q E A L D T I S G S L K N T V E K Y G N E A V Y I N Y T S G I V G G N I T  
UniRef90\_B11F3 A G W E E A L G L A A G G F S R Y K G G G A V V L Y S P R V T N E E I Y  
UniRef90\_UPI000349134F V G W D E A L D D I A A R L K A I A A R D P Q A I L L P Y S Y A G T M G F V  
UniRef90\_D6SM83  
UniRef90\_R7PHB7 M T W D D A V K E L A A G R W S R I L K E E D G A D A L L P M Y Y S G V M S  
UniRef90\_D5V743 A P Y E F T T S L L A A W K L T E I L K Q R Y G R H S F C G M G G A R T S C E S A Y  
UniRef90\_I3CCR3 L S W E Q A I N E V G D K L L T I R E T A S P D S V Y W L G S A K F S N E Q A Y  
UniRef90\_M7CQ42 I S W D E A F D L V A N R L H Q V R S Q H G R N S I G V Y L G E N P N  
UniRef90\_L1KHF0 C G W D T A M E R V A A R S R E L L D E R G P G S I G F Y T T G Q L F L E E Y Y  
UniRef90\_F8D3F8 T T L E T A L E R A A E G L E G A L D E A G P E G V A V L G S G Q Q T N E A A Y  
UniRef90\_D8F4G9 I S W D Q A M D E I A A R L N Q V L K E K Y G H T L M L W T G S V G V  
UniRef90\_G8TT95 A G W D E A L T K A A L L F G V K N A Y G G N A L G V F S C S K S T N E L N Y  
UniRef90\_F7UYF7 A T W D E A L E L V S T K L K E T W K N D K S R L A F W G S G Q Q P I T E G Y C  
UniRef90\_E6TJF1 V S W D E A M S D I A D R L S R V L R S H G P G A V G W Y M G N P G A  
UniRef90\_W7IWJ3 I S W E A F D L V A T R L A D V R D R H G R D A V G V Y L G N P T V  
UniRef90\_UPI00035FOCC4 C D W D T A L D R I A T R T T E L L D T A G P E A I A F Y T S G Q L F L E E Y Y  
UniRef90\_UPI00036DF337 A T W E E A L R V T A D G L R E T R A R H G A D A V G V F G G G L T N E K A Y  
UniRef90\_B8K6S8 I N W D Q A T D I I J A N A Y H R E A I V E S G P S S T A M Y V S G Q L L T E D Y Y  
UniRef90\_T0D452 I S W A Q A Y R E I G Q Q I R V A I D K Y G H H S I L H A F D W  
UniRef90\_F6AJN3 I S W E Q A F D I M E K F K A A L R E H G P Q A V G M F G S G Q W T V W E G Y  
UniRef90\_B9M850 I T W D D A I G E I A L R W R E I G R Y G A E A I L P Y S Y A G T M G  
UniRef90\_UPI0003600670 V S W E E A L D D I A G R L K T L L D T R G P S S V L R Y H Y A G T M G L M E N  
UniRef90\_A0EJ3 V S W D Q A F D I M A E K W K A A L K D K G P T S V G M F G S G Q W T V W E G Y  
UniRef90\_D3FYD3 I S W E H A L A L I K E K F T G I Q S S Y G K N A L S V Y G S A T I T N E E A Y  
UniRef90\_F4LR9 I S W D T A Y E E I T A K L M Q L R K E S G P D S V Y W I G S S K H N N E Q S Y  
UniRef90\_J7LFF3 T D W D T A L D H V A E R L M A L R A A A G P D S V A V F G G G L T N E K A Y  
UniRef90\_B8FV01 I S W D E A A E L J A K E L K R V Q S T Y G P C S V L A Q A D G H G E T H G P H  
UniRef90\_UPI00041496CE I S W T Q A F D I M E Q K W K E A L K T T G P A S I A M F G S G Q W T V W E G Y  
UniRef90\_I3REZ1 V S W N T A L N M I A E K L E E A L R D Y G S Y S V L V Y K Y A G D R G  
UniRef90\_K9WCM8 I S W D E A L G T I A T K F L A L R D S Q R Y F A I A N K T S G R M P R G T G S  
UniRef90\_UPI0002D77CF6 V S W D V A F D T M A E K W K A A L K K H G P T G I G M F G S G Q W T V M E G Y  
UniRef90\_X8BQS8 T S W D D A L Y R V A R G F Q R A Q A V T G R D A V G V F G A G A L T N E K A Y  
UniRef90\_UPI000405B275 I S W E Q A L R E I A D K I Q H V L A T H G H A I L H A Y  
UniRef90\_F7UVZ3 I D W D T A F S E I G Q K V K E I I A H S G P E S L A I T Q D P R P S G K Q  
UniRef90\_Q3AA07 I S W E K A F A L T E K I G E L L Y A K G E T L S I L H L Y D H  
UniRef90\_I4A6Q1 I S W E A F E S I A G E L K R L K E E H G N R A I F A D G G D A S  
UniRef90\_W0EC37 I S W E E A Y T L L T R K L Q E T L E Q T G P L G L L H H Y D  
UniRef90\_M4UPG1  
UniRef90\_U6E9R8 I S W D E A L N I A A F K I S Q V I N Q Y G S S I L Y Y Q G F G A R T A  
UniRef90\_Q8U7P1 V S W D E A F D V M A Q Q C K R V L K E K G P T A V I G M F G S G Q W T V F E G Y  
UniRef90\_K6WLA2 A S W D A L S A I T G G L R D I W A A H G R S A V G V F G G G L T N E K A Y  
UniRef90\_A1SBQ9 L S W D Q A I N E I G D K M L S I R E Q S G P D S V Y F M G S A K F S N E Q S Y  
UniRef90\_M1PCH9 I S W K E A L D E C G S K L K N T V D Q Y G A Q G I C V F P H G A  
UniRef90\_K7RN92 I T W D G A L E E I G T K L N A L A T E H G P T A I S T Y W G N A S D S L S I L  
UniRef90\_S9QDD6 V S W D E A F D V M A E K V K V L A E K G P E G I G M F G S G Q W T V L E G Y  
UniRef90\_UPI00047B79B0 V S W D E A F D V M A A Q F K Q V L K T K G P G A V I G M F G S G Q W T V F E G Y  
UniRef90\_I5BRJ0 A S W E A L D R V A E A F L K A E E K Y G T E T V W P Y Y A G T M G L V I Q R  
UniRef90\_Q56350 V S W E E A F D T M A A Q A K R V L R D K G P T A L G M F G S G Q W T V F E G Y  
UniRef90\_UPI00037607D5 L S W D T A M G E I S S K L Q D I R K K H G P D A L M T L G S A H H N N E T S Y  
UniRef90\_W0JTA8 T T W E T A L E R A A E G L G T A H A G S N H V A V L G S G Q Q T N E A A Y  
UniRef90\_B9LNQ6 T S W E T A I G T V V S H I E D A L A E T R D G V A V L G S G Q Q T N E A A Y  
UniRef90\_E1QE75 A D W D E A L D L V A G R L A A I K A A H G P E A F C G V A D V G G V N E D A Y  
UniRef90\_UPI00046801A3  
UniRef90\_D7BG58 V S W E E A L D A I A E R L R E V I D R H G P E A V L P Y H Y A G T M G L H Q Y  
UniRef90\_UPI0003B3AE7D V S W D E A L D D I A Q R L L A I R D Q H G G D A F A F F G G G Q G N H L L G G  
UniRef90\_V6PC80 I T W D Q A F D V M E K F K T A L K E K G P E S I G M F G S G Q W T V W E G Y  
UniRef90\_F4CUS7 T D W N T A M G R V V D R T R T L R R E Q G P S A I G F Y T S G Q L F A E E Y Y  
UniRef90\_UPI0002F001ED I S W E E A I D T I A D K L L E L R K T N E T H K F A L L R G  
UniRef90\_E5Y3B6 V R W E E A L D A V A G K L R A I R D Q Y G P E S V M F S H R G G P F T  
UniRef90\_UPI0004652A99  
UniRef90\_R5FP01 I S W D E A L G I V A S E V T R I K E A Y G N K S I L A L G Y E Y R N V  
UniRef90\_K0EYK0 I G W D E A F R E L V Q R L R A V R H E H G P S A I G M Y L G N P A A H S S S V  
UniRef90\_K8CVE0 V S W D E A I R Y T A E R L S A I K K Q Y G P R A I M T T G S S R G T N E T N Y  
UniRef90\_A9FEA4 I G W D E A I A I V A R R A M Q N P A G F A L Y G S G Q W T V P E G Y

UniRef90\_UPI0003F63F17 T L G V T A H G A L I G T N H L D G N T R L C T A T A A E A L K E S F A S D G Q P 130 140 150 160  
UniRef90\_G9XU05 P Y L T Y A A F G S P N Y V L G F L S G D S C Y A Q Q A V M N S D F F V C D C A  
UniRef90\_T0IWZ6  
UniRef90\_UPI00037D72D4 L M S K L V R F L G S N N V D S C A R V C H E P S A T A L R E T V  
UniRef90\_I0H3D9 A H T M A G G L Y V I T P L L K A T G T R N V F S A S T V D Q M P K H V S C G Y L  
UniRef90\_R4X184 A G V K L M K A G F R S N N I D P N A R H C M A S A V T G F M R T F G M D E P M  
UniRef90\_K9GZB5 A A A K L F K A G F R S N N I D P N A R H C M A S A V A G F M R T F G I D E P M  
UniRef90\_A4EXJ0 A G S M D R R F F Y Q M G A T L L D R G P L C G G V R G A A Y A S L F G G A P  
UniRef90\_UPI0003FCBA32 L L G K L A R V L G L G T K Y V D Y N G R F C M S S A A S A G M K A F G L D R G F  
UniRef90\_W7SVV2 L V A R L F A L L G S P N N T D V G P V C N D A G A N A L K A T F G I G N F T N  
UniRef90\_R4LKN0 A L A V L G K A G V I G T P H M D G N T R L C T A T A A A F K E S F G A D G Q P  
UniRef90\_B8DLD3 L V A R L F A L L G S P N N T D V G P V C N D A G A N A L K A T F G I G N F T N  
UniRef90\_I0LC12 A L G K F A R V A L R T R N I D Y N G R F C M S S A A A A A G L R A F G  
UniRef90\_W1JRT3 L F R K L G A F W G T N N T D H Q A R I C H S T T V T G V A N T W  
UniRef90\_D7C0X4 V A Q K F A R V V M G T T N N V D S C N R T C H A P S V A G L S A V F  
UniRef90\_Q65NC5 L L G K F A R V A L M K T K H I D Y N G R L C M S A A A T A N Q T F G M D R G L  
UniRef90\_Q07WV3 S S C F N R V L N L N G G F L N I Y G N Y S W A Q T E A A A A T G  
UniRef90\_C8PYN5 V A N K E T K G F L G T N N L D S N S R L C M S S A V A G Y K R A F  
UniRef90\_U1PHV0 A L G K V T R G A I G T Q Y Y D A N T T L C M A S A V T A Y Y Q A F  
UniRef90\_X1FP41  
UniRef90\_E1SB11 V A N K L M K G Y I G A A N I D N T S R L C M A S A V V I G Y A N T W  
UniRef90\_H1FSA1 Y F R K F A A M Y G T N N I D H Q A R I U H S A T V A G V A N T W  
UniRef90\_D0CVM2 A A A K L M K A G F R S N N I D P N A R H C M A S A V V I G F M R T F G I D E P M  
UniRef90\_D4H8U3 H Y L V Q S Y G S L N T V R H P T L C L S S V I Q G W  
UniRef90\_UPI00037A3882 K S D Q I E G L L G R F L G M Y G C R T S S W S V P S Y E G T K F S S R I T F  
UniRef90\_Q1Z843  
UniRef90\_U5WTE2 Y Y T Q A V I A H G A L I G T N H V D G N T R L C T A T A A E A L K E S F  
UniRef90\_G8QFB2 A A A K L W K A G F R S N N I D P N A R H C M A S A V A G F M R T F G I D E P M  
UniRef90\_K8ZQZ9 P Y A S L V A R L M N C Y G G F L S H Y G T Y S T A Q I A A A M P Y T Y G S N D  
UniRef90\_B11F3 L A L K F A R A V L G T S N I A D A E S F A S R A G L L D G L G T T V  
UniRef90\_UPI000349134F Q G E A M A G R F F H R L G A S Q L N R T I C A E A G A T G L A L T Y  
UniRef90\_D6SM83  
UniRef90\_R7PHB7 V L Q R K C G D A F F N R M G A C D M V R T L C S S A K G A G Y E A V M  
UniRef90\_D5V743 M F Q K F V R T A M D S P H I L W G T N N V D H Q A R I C H S T V A G V A N T W  
UniRef90\_I3CCR3 L F R K F A A L W G T N N V D H Q A R I C H S T V A G V A N T W  
UniRef90\_M7CQ42 V H N H G S L V A T M P F L R A I L G S Q N R F S A T S N D Q L P H M L T S L E M  
UniRef90\_L1KHF0 T L A V L A R A G I G T N H L D G N T R L C T A T A A E A L K E S F G C D G Q P  
UniRef90\_F8D3F8 A L G K L A R G G F G T P Y Y D A N T T L C M A S A V T A Y Y D A F  
UniRef90\_D8F4G9 E M S Y F M Q R F R G A F G S P H F Y N A E G I C F R T R I L A R  
UniRef90\_G8TT95 L A S K F S R V V F G T H N V D S C N R T U H A P S V A G L A A V F  
UniRef90\_F7UYF7 T A K F W K A G L L S N N I D P N A R L C M A S A V V I G F M N V F  
UniRef90\_E6TJF1 F S Y A H V M A I M A F I K G I G P G T H F F T A S S Q D T N C R L M A S Q L L  
UniRef90\_W1WJ3 H S L G A L T H G T G F M G M L R T R N R F S A T S V D Q L P H H L V A Y L L Y  
UniRef90\_UPI00035FOCC4 T L A V L A R A G I G T N H L D G N T R L C T A T A A E S L K Q S F G C D G Q P  
UniRef90\_UPI00036DF337 A L G K F A R V L G T S Q I D Y N G R F C M S S A A A A H N K A F G L D R G L  
UniRef90\_B8K6S8 A A N K F M K A T V G S A N I D T N S R L C M S S A V V A H N R A F  
UniRef90\_T0D452 G S G A L L K S L S Q R F F Y Q L G G C T E T V I G S L C W D A G L E A Q R Y D F  
UniRef90\_F6AJN3 A A N K L M K A G F R S N N I D P N A R H C M A S A V M G F M R T F  
UniRef90\_B9M850 L I Q R N S G H P F H A L G A S R L A R T I C S P A K D A G W Q A V  
UniRef90\_UPI0003600670 A H A H T L W R A L I G T P E L E E T I C A T A G S A A W T L G  
UniRef90\_A0EJ3 A A A K L N K A G F R T N N I D P N A R H C M A S A V A G F I R T F G A D E P M  
UniRef90\_D3FYD3 L L G K F A R V A L Q T K Y I D Y N G R L C M S S A A S A V Q T F G M D R G F  
UniRef90\_F4LR9 L L R K F V I S F W G S N N C D H Q A R I C H S T T V A G V A N T W  
UniRef90\_J7LFF3 T L G K F A R L A L A T S Q I D Y N G R F C M S S A A A A G N R A F G L D R G M  
UniRef90\_B8FV01 G C Q T G L E L L G G Y T V Q A R N P D S W E G W G A K H V W G Q D P V G  
UniRef90\_UPI00041496CE A A S K L W K A G F R S N N I D P N A R H C M A S A V A G F M R T F G I D E P M  
UniRef90\_I3RE21 V V S Y Y P M R L F H Y L N A S T I E G G L C D R A G Q E A L K D V  
UniRef90\_K9WCM8 V I G R F F T L L G S P N N T D V G P V C N D A G G N A L A W T F G L G N F T N  
UniRef90\_UPI0002D77CF6 A A A K M M K A G F R S N N I D P N A R H C M A S A V G G F M R T F G I D E P M  
UniRef90\_X8BQS8 L L G K F A R V A L G T A N I D Y S G R F C M A A S E A G L R S F G  
UniRef90\_UPI000405B275 W G S G T V L K V A L G T A R N I F Y L L G G C T E T V I G S L C W E A G L E A Q R Y D  
UniRef90\_F7UVZ3 Y S K R F M H A L G S A N V Y A H S S C N L S K E S A Y T L T I G A S  
UniRef90\_Q3AA07 G S G G Y L K R L D E R F F N C L G G V T N P S G S L C W G S G Y E A M Q R D F  
UniRef90\_I4A6Q1 K V L A L Y G G Y V S N W G T S R G G T W H G T N G P V I G I G P S A V E G I N D  
UniRef90\_W0EC37 Y A H N G A L R A L D Q R F F Q A L G G M T V P E G S M C W G A G Y H A Q A I D  
UniRef90\_M4UPG1  
UniRef90\_U6E9R8 L Q V M N R R F F N L L G G V T T T Y G T V C G G I G H T A M E A D F  
UniRef90\_Q8U7P1 A A T K L M R A G F R S N N I D P N A R H C M A S A A Y A F M R T F G M D E P M  
UniRef90\_K6WLA2 T L G K F A R V A L R T P F I D Y N G R F C M S S A A A A G N R A F G L D R G L  
UniRef90\_A1SBQ9 L Y R K L A A M W G T N N V D H S A R I C H S T T V A G V A N T W  
UniRef90\_M1PCH9 S A K Y P M H Y F E R A V G T H N V I S E A S F F Q C R G I R D T A Y V A T I G K  
UniRef90\_K7RN92 L S T A F C H A F G S P N S M N V L S L E Y T D R G A V A D R V Y  
UniRef90\_S9QDD6 A A T K L M R A G F R S N N I D P N A R H C M A S A V A F M R T F G I D E P M  
UniRef90\_UPI00047B79B0 A A N K L M K G G F R S N H I D P N A R H C M A S A V M G F M R S F  
UniRef90\_I5BRJ0 D S I D R L R H A K R Y S G F G T V C T N A A W T G F V I M G  
UniRef90\_Q56350 A A T K L M R A G F R S N N I D P N A R H C M A S A A Y A F M R T F G M D E P M  
UniRef90\_UPI00037607D5 A L R K F A A F W G S N N I D H Q A R I C H S T T V A G I A N T W  
UniRef90\_W0JTA8 A L G K L A R G G L G T R Y Y D A N T T L C M A S A V T A Y Y D A F  
UniRef90\_B9LNQ6 A L G K L A R G G F G T R Y Y D A N T T L C M A S A V T A Y Y Q A F  
UniRef90\_E1QE75 N M Q K F F R A V L G V N N I D H R G R A C L A P Q A T G P A A A C  
UniRef90\_UPI00046801A3  
UniRef90\_D7BG58 E H P L A F F R A I G A S A L D T T I C A T A G S A A W E A T Y  
UniRef90\_UPI0003B3AE7D A Y G G G Q L R V A M R S R N N Y N S L G Q E K T G D F W L N G R L  
UniRef90\_V6PC80 A A S K L F K A G F R S N N I D P N A R H C M A S A V V I G F M R T F G M D E P M  
UniRef90\_F4CUS7 S L A I L A H A F I G T N H V D G N T R L C T A T A A A A L K E T F  
UniRef90\_UPI0002F001ED R Y T G L T E I L Y K S F P S I F G S P N G I S H S A I C A E A E K F G P Y Y  
UniRef90\_E5Y3B6 D L Y K A F A R G L G T P N I Y S H S V T C T R N V D Q A C A S V L G L D R G R  
UniRef90\_UPI0004652A99  
UniRef90\_R5FP01 I P G L Y T A P S L N A Y G G C T T T W G Q A S Q G A F P L V S N S M K G S Y N  
UniRef90\_K0EYK0 I Y G A L L R A V L L T R N F Y S A S S I D Q F P Q E F V A W R M  
UniRef90\_K8CVE0 V M Q K F A R A V L N T N N V D C C A R V C H G P S V A G L Q Q T L  
UniRef90\_A9FEA4 A A N K L V K A G L G N N Q I D P N A R L C M S S A V T G F L S T Y

UniRef90\_UPI0003F63F17 G S Y A D 170 L D H A D V I A L F G H N I A E T Q T V T W M R I L D R L 200  
UniRef90\_G9XU05 Q F F E E R Y D N P E F K N P E V I V I W G N N P V I T N G D G F F  
UniRef90\_T0IWZ6 G A S M T N S I N E I P S S K V L F V I G A N P T E A H P V I G A K  
UniRef90\_UPI00037D72D4 G V G A S G T S V E E M V N A K V I V I A G E Q L T E S H P V L V D  
UniRef90\_I0H3D9 F G N P L T I P V P D L D R T D F L L I L G A N P W E S N G S L A T A A D F P G  
UniRef90\_R4X184 G C Y D D I E E T D A F V L W G S N M A E M H P V L W T R V T A  
UniRef90\_K9GZB5 G Y D D L E H A D A F V L W G S N M A E M H P I L L W S R L T  
UniRef90\_A4EXJ0 G M P P M Q V L Q S D L V L V W G N N V T V S N L H L  
UniRef90\_UPI0003FCBA32 T N H I E Q I P S D A K C I L I A G T N V S E C Q P T F V P  
UniRef90\_W7SVV2 G Y G T D G T G K D D L E H C D A I F L Y G H N M A E T Q T V L W M R I L D R T  
UniRef90\_R4LKN0 G S Y T D L E H C D A I F L Y G H N M A E T Q T V L W M R I L D R T  
UniRef90\_B8DL D3 V S H D P L D H C N S N S L I L W G R N P A S T Q P S L V P  
UniRef90\_I0LC12 V D R G L P F P L S D L G R A D T L L L V G A N P A E T M P P L V  
UniRef90\_W1JRT3 G Y G A M T N S I N D M R N S K T M L F I G S N A A E A H P V S M Q  
UniRef90\_D7C0X4 G S G G G T S S Y A E V I E D T D L I V M W G S N A R F A H P I F  
UniRef90\_Q65NC5 T N A L S E I P H A R V I I A G T N I A E C Q P T I M P  
UniRef90\_Q07WV3 F S S T S G S N L L A L N D S D L F I G L G Y N P S E M R Q S G S G E G Y D F L  
UniRef90\_C8PYN5 G S D T V P C N Y E D I E N S D L F I I G S N M A W C H P I L F G  
UniRef90\_U1PHV0 G S D G P P P T Y D D I P K A N T H V V W G A N P A V A H P V L Y S W I A N S V  
UniRef90\_X1FP41 G A D A V P C C Y E D L E Q A D L V L V G S N A A W A H P V V W  
UniRef90\_E1SB11 G Y G A M T N S L G D I Q A D K A I I F G A N P A V N H P V V G F  
UniRef90\_H1FSA1 G C Y D D L E H A D T F V L W G S N M A E M H P I L L W S R L T D  
UniRef90\_D0CVM2 S S V F G V F P D A D M H A N A M F A I M F G S N R A E A L V T P D  
UniRef90\_D4H8U3 G T I E D G N E D A F A H S K L I I M W G W N P A Y T F H G G N T  
UniRef90\_UPI00037A3882 G C D G Q P G S Y T D V D H A D V I A L F G H N V A E T Q T V L W A R M L D R L  
UniRef90\_Q1Z843 G Y D D A E H A D V F A L W G S N M A E M H P I L L W S R I T  
UniRef90\_U5WTE2 G N S T S D I E N T K L V V M F G N N P A E T R M S G G G I T  
UniRef90\_G8QFB2 G S N A M T I P V R Q L E R A A G H F V I S S S P T E S H P I I G F E L H F  
UniRef90\_UPI000349134F G A T V G H L E H F A E S R L I L I W G S N S I A S N I I G  
UniRef90\_D6SM83 G T G G C L D P R E D L K D S S F Y L V W G S N M K A T R L Q S  
UniRef90\_R7PHB7 G E G A A T N P Y D D V Y E A E N I I M G S N T T E A H P I V A  
UniRef90\_D5V743 G Y G A M T N S Y N D M H N A K A V M L I G G N P A E A H P V S  
UniRef90\_I3CCR3 F G H Q I L F P I P D I D H T D L F M C I G A N P M A S N G S L M S V P D I R G  
UniRef90\_M7CQ42 G S Y D D I D H A D A I A L F G H N I A E T Q P V Q W M R I L D R L  
UniRef90\_L1KHF0 G S D A P P P T Y D D I P E A E T H L V W G A N P A A A H P V M F R W I N Q S  
UniRef90\_F8D3F8 Q M T F G R C P A E E F R N S N L V I L W G N N P D A S Y F M N  
UniRef90\_D8F4G9 G T G A S T S Y E E F H H T R M I L L V G S N A A E A H P I I  
UniRef90\_G8TT95 Q T D E P A G C Y T D L D E A D V F I T W G A N M A E A H P M L Y S R L T A  
UniRef90\_F7UYF7 Y G T P T S V P I P D L T R T D L L V M M G A N P V V S H G S F L T A P R I  
UniRef90\_E6TJF1 G H Q L M L P I P D L D R T D H F L V I G G N P M A S N G S L M T V P D F  
UniRef90\_UPI00035F0CC4 G S Y T D I D H A D V I A L Y G H N V A E T Q S V L W A R I L D R L  
UniRef90\_UPI00036DF337 P F P L E A D I P R T G C V L V G S N L A E T M P P A  
UniRef90\_B8K6S8 G E D V V P V N Y A D I D D A G L I V I C G A N T A W T H P V L F R R I Q R A  
UniRef90\_T0D452 G Q A R S H A P D D M V R N S R G L V V W G R N V A T T N V H M  
UniRef90\_F6AJN3 G M D E P M G C Y D D I E A T D S F V L W G S N M A E M H P V L W S R V T D  
UniRef90\_B9M850 M G E T P P P P E S V A K S D L V I L W G I D A A A T S I H F  
UniRef90\_UPI0003600670 Y G A R F G V D P L D V P H A R L I V L W G I N S L S T H S H L  
UniRef90\_A0EJ3 G C Y D D L E H A D A F V L W G A N M A E M H P I L L W S R L T  
UniRef90\_D3FYD3 T N S I R D I E G T R C I I A G T N I A E C Q P T M M P Y  
UniRef90\_F4L8R9 G Y G A M T N S Y N D M Q N S K V A L Y I G S N A A E A H P V S M L H M L H  
UniRef90\_J7LFF3 P F P L T D V A E A D V L L A G A N P A E T M P P M M G H L S S P A  
UniRef90\_B8FV01 Q G T Q T N L W K D V A D N S E L I L F W G C D P E T T T W G S G Q Q A  
UniRef90\_UPI00041496CE G C Y D D I E N A D A F V L W G S N M A E M H P I L L W S R I T D  
UniRef90\_I3REZ1 Y G T A V G L D P E D L R N H K L T V Y W G I N A F W T N L  
UniRef90\_K9WCM8 G Y G K D G T G K E D L G A K Y F L F L G T N Q A E T H P V T F A Y L  
UniRef90\_UPI0002D77CF6 G C Y D D F E H A D A F V L W G S N M A E M H P V L W T R I T D  
UniRef90\_X8BQS8 V D R G A R S P F P V A D L D D A G A V L V F G G N P A E T M P P F M Q  
UniRef90\_UPI000405B275 F G Q A R S H A P A N D L T N A S G I V V W G R N V S V T N I H M  
UniRef90\_F7UVZ3 N F S T D F A N A K M V M F I G R S Y G D G I R P S S V H  
UniRef90\_Q3AA07 G A P T L G E Y H D L I N S K A L I L W G R D P D T T N L H L  
UniRef90\_I4A6Q1 R I D M R N C E T V I M F S M P A W S A G N P A Y N  
UniRef90\_W0EC37 F G G V Y Q N D W A S L R Q S K T I I L W G K D P A V T N I H L  
UniRef90\_M4UPG1 I Q H A K C L L I F G Y N A G D S H P I V  
UniRef90\_U6E9R8 G A K L S H D P L D H L H S N H I V W G R N P A V T D I H L  
UniRef90\_Q8U7P1 G C Y D D F E H A D A F V L W G S N M A E M H P I L L W T  
UniRef90\_K6WLA2 P F P L T D L A G A D A L L L G S N V A E T M P P A  
UniRef90\_A1SBQ9 G Y G A Q T N S F N D M R N S K C M M F I G S N V A E T M P V A M Q H V L T G  
UniRef90\_M1PCH9 A P G E K I D M P N T K V L F F I G D H L G E N I H V S H  
UniRef90\_K7RN92 G N E N F I L Q Y D L E N A E F G L L G T N P F E T Q G M T L L Q R R P S I  
UniRef90\_S9QDD6 G C Y D D F E H A D A F V L W G S N M A E M H P I L W T  
UniRef90\_UPI00047B79B0 G M D E P M G C Y D D I E A D A F V L W G S N M A E M H P I L W T R V T  
UniRef90\_I5BRJ0 T G D L R G P D P R E M A K S D C V V I W G T N A V A T Q V N V M  
UniRef90\_Q56350 G C Y D D F E A D A F V L W G S N M A E M H P I L W T R V A  
UniRef90\_UPI00037607D5 G Y G A M T N S M N D I R N S K C V F I I G E N V C T S H P I A M  
UniRef90\_W0JTA8 G S D A P P P T Y D D V P E A E T H L V W G A N P A A A H P V L F R W I R Q S  
UniRef90\_B9LNQ6 G S D A P P P T Y D D I P E A E T H V I W G A N P A V A H P V M Y R W I A D S  
UniRef90\_E1QE75 G S G A M T N S F A E L E K A K L I L V I G A D V T E D N P V A  
UniRef90\_UPI00046801A3 G A P R Y G I D P E D V P K A R F I F L W G I N S L H T N T I H L  
UniRef90\_UPI0003B3AE7D F G H Q T C H T T E D V E H A D Y L L F I G C N P F Q A H G I P N A R D T L R E  
UniRef90\_V6PC80 G C Y D D I E Q A D A F V L W G A N M A E M H P I L W S R I T N  
UniRef90\_F4CUS7 A C D G Q P G S Y G D V H A D V I A L F G H N A E T Q P V L W M R I L D R L  
UniRef90\_UPI0002F001ED T E A F W D Y R D Y D L A Q T R Y A I L L W S T D P V A S N R Q V P H  
UniRef90\_E5Y3B6 L V I D Y R E S K H I V L Q S R N A L E A L N L A E V A G  
UniRef90\_UPI0004652A99 L G A L D F S D R Y E T R K A K L I I M W G Q N P A W S Q A G N P L Y H Y L  
UniRef90\_R5FP01 F G S N V L M P V D I D R T D R L V I L G A N P A V S N G S I T T M P N A  
UniRef90\_K0EYK0 G N G A M S N S I G D I E H S K C L L V F G Y N C A D S H P I V  
UniRef90\_K8CVE0 G V D E P A G C Y E D L D R C D I V L L M W G N N P A E M H P V L F S R V V D R R  
UniRef90\_A9FEA4

UniRef90\_UPI0003F63F17  
UniRef90\_G9XU05  
UniRef90\_T0IWZ6  
UniRef90\_UPI00037D72D4  
UniRef90\_I0H3D9  
UniRef90\_R4X184  
UniRef90\_K9GZB5  
UniRef90\_A4EXJ0  
UniRef90\_UPI0003FCBA32  
UniRef90\_W7SVV2  
UniRef90\_R4LKN0  
UniRef90\_B8DL3  
UniRef90\_I0LC12  
UniRef90\_W1JRT3  
UniRef90\_D7C0X4  
UniRef90\_Q65NC5  
UniRef90\_Q07WV3  
UniRef90\_C8PYN5  
UniRef90\_U1PHV0  
UniRef90\_X1FP41  
UniRef90\_E1SB11  
UniRef90\_H1FSA1  
UniRef90\_D0CVM2  
UniRef90\_D4H8U3  
UniRef90\_UPI00037A3882  
UniRef90\_Q1Z843  
UniRef90\_U5WTE2  
UniRef90\_G8QFB2  
UniRef90\_K8ZQZ9  
UniRef90\_B11F3  
UniRef90\_UPI000349134F  
UniRef90\_D6SM83  
UniRef90\_R7PHB7  
UniRef90\_D5V743  
UniRef90\_I3CCR3  
UniRef90\_M7CQ42  
UniRef90\_L1KHF0  
UniRef90\_F8D3F8  
UniRef90\_D8F4G9  
UniRef90\_G8TT95  
UniRef90\_F7UYF7  
UniRef90\_E6TJF1  
UniRef90\_W7IWI3  
UniRef90\_UPI00035FOCC4  
UniRef90\_UPI00036DF337  
UniRef90\_B8K6S8  
UniRef90\_T0D452  
UniRef90\_F6AJN3  
UniRef90\_B9M850  
UniRef90\_UPI0003600670  
UniRef90\_A0EJ3  
UniRef90\_D3FYD3  
UniRef90\_F4L8R9  
UniRef90\_J7LFF3  
UniRef90\_B8FV01  
UniRef90\_UPI00041496CE  
UniRef90\_I3REZ1  
UniRef90\_K9WCM8  
UniRef90\_UPI0002D77CF6  
UniRef90\_X8BQS8  
UniRef90\_UPI000405B275  
UniRef90\_F7UVZ3  
UniRef90\_Q3AA07  
UniRef90\_I4A6Q1  
UniRef90\_W0EC37  
UniRef90\_M4UPG1  
UniRef90\_U6E9R8  
UniRef90\_Q8U7P1  
UniRef90\_K6WLA2  
UniRef90\_A1SBQ9  
UniRef90\_M1PCH9  
UniRef90\_K7RN92  
UniRef90\_S9QDD6  
UniRef90\_UPI00047B79B0  
UniRef90\_I5BRJ0  
UniRef90\_Q56350  
UniRef90\_UPI00037607D5  
UniRef90\_W0JTA8  
UniRef90\_B9LNQ6  
UniRef90\_E1QE75  
UniRef90\_UPI00046801A3  
UniRef90\_D7BG58  
UniRef90\_UPI0003B3AE7D  
UniRef90\_V6PC80  
UniRef90\_F4CUS7  
UniRef90\_UPI0002F001ED  
UniRef90\_E5Y3B6  
UniRef90\_UPI0004652A99  
UniRef90\_R5FP01  
UniRef90\_K0EYK0  
UniRef90\_K8CVE0  
UniRef90\_A9FEA4

210  
220  
230  
240

G H W L V D E M R N G A K L I V V D P R R L T E W L A A R K A E Y W L Q L R P G T N  
M R Q A L R N G A K L V V A D P R K T E L A G K A H V L W L Q L R P G T D  
Y L L K A K E R N G A K V V V I D P V F T K T A R Y A T L F L Q V N Q G T D  
R L K A I Q A R G G R F V V V D S T F E H R S F D L A D Q T L V F T P G T D  
D R R L T H S G C Q V A V L S T F E H R C F E L A D L P M L F K P H S D  
A P L L K K M R A Q G G Q L V I I D P K R I K I A E Q C D M H V Q I K P G S D  
Y L E E A R Q N G C F L I V I D P R E T D T A A M A D L H L K I K P G Q D  
L R G R E R T G A R L V V V D P R K T P T G A M A D E W D L K P H T D  
R A D D P P A I V V C V D P R R T P V A E R T G G V H L A P K V G T N  
L L R D I R K R G G T V V L V D P V R N R S A P L A D R H L T A P R A G T D  
R W L T E Q R R G G Q L I V V D P R V T A T A R Q A D D L H L Q P L P G T D  
H L L E G K E L N K A N F I V F D P R L T R T A A H A T E Y V R I R P G T D  
F Q H V L K G L H N G A R I M Y A V D P R R T S T A E W A E S W L G L N V G T D  
Y F E E A K Q N R A Y I V I D P R E T A T A K I A D L H L K I K P G T D  
N A L Q K N N G L E I V M I D P R Y T D S M A G K E D N W F P I R P G T D  
R L K S S K Q A N S D G E L I V V D P V I T T T A A D A D I H A Q P N P G T D  
T E L E V K R A V D K G A K L I V A N P R E I D L C R F A S L W L R H N P G T D  
Q R L M Q A K L Q R P A M R I V V D P R R T A S C D Q A D L H L P L R P G S D  
Q H F L K A K E Q N N A K I V V D P V F T K T A A K A D H L Y C R I R P G T D  
T R L T K P G A Q V H V L S T F E H R S F E L A D N G I I F K P Q T D  
S L D I Q K N R P K G Q K L V Y L D P R Y T A T A A K A D K W Y P V K P P T D  
F Y Y M R M A K Q G C F L V L V D P Q Y T D S A A Y D A W W I P L R P N T D  
A R H L L K A R A K G A K I V C V D P R K T E S A R V A D Q W L Q Q K N G S N  
D R R L N A K H V K I H V L S T F T H R S C E L A D N E L I F K P Q S D  
Y F L E Q A R E R S N A R M I V I D P R Y T D T A A G R E D E W I P I R P G T D  
L R K S V N K G A K L I A D S R E P L S R L P H I R L A L R P S T E D  
W T Y A Q A A K R A G A K L I A I D P R R T E T A E K C H Q H I A L R P G T D  
L E M K K A V R R G A K L I V I D P R K I E L V R W S H D H L Q L K P G T D  
M P A L I Q A R R Q K R V V L I E S C A A D M E V Y C Q T L I R P G T D  
N R L I K A A R D K T A E L T V I D V R E I Q I G K F A T N S L V I R P Y E A N  
L Q H I F R A K E R G A K L I V I D P R F T R T A A H A D H Y V R L R P G T D  
R L K A L K Q R G G K L I V I D P R R T E T A K V A D E F H F I R P G S D  
E G G D P R I V C V D P R P T P V A R R A T V H L A P R V G T N  
G K M L R E R V A G G M K L V V I D P R R L P L A D H G I Y L Q P R P G T D  
F H H M M R G V R N G A E L V V V D P R K T L T A K R A H E H V Q I R V G S D  
K D R M H D I V K R G G R V V V I D P R K T E T A A Q F E W C G I V R P D T D  
A R R R R A L A E R G G R M V V V D P R R T E T A K V A D E H H F V R P G T D  
L R Y L T E L K D N G G T L I V V D P R R T K T A E Q A D L H L A P R P G T N  
M P F L K A A Q A R G A K L V V V N P L P T D V A R R A D M C V Y P R P G T D  
L R G V Q D A K R G A R I W L I N T Y E T A T A S A A D E V I L V R P G S D  
T P Q M T A A R K A G A R I I H V D P Y R N R T S A Y A D Q H L K L K P G T D  
D R R L T H E K C K V A L S T F K H R C F D L A D N G M V F T P Q T D  
F E R A K E K G C F L I A I D P R E T M T T K L A D I H L K V K P G M D  
S R L C Y W F T E I G L K S I Y V C P D V N Y G A A V H A D K W L P V R P N T D  
H G F M L A K K H N L E I W T V D V L R T E T A K R S N K F Q I K P D T D  
L R S R A Q T K A K L I V I D P R L T P T G A Q A D E W L A P K P H T D  
H L E P A A S C G G L I V V D P R Q S A T E R A L R G K G I H V A L T P G T D  
T P F L K A I S N G A K L I V N P R L P T D L H P R A D L V I A P R P G T D  
S L A D A E N G T R I V L V D P R L N N S G I F A S D W V P I K P G T D  
L P F L K E A K E A G A E L V A I N P L K L K V A L G R H I S L K P G T D  
I P H L L A A K K E E A Y L I V I N P T Q V K S A E L A Q E Y L R I N P G T D  
A K H I L K A K A N G A K I V C D P R K L E S A R V A D Q W L Q L K N G S N  
W R I L R K V Q R G A K T P I I V I D P V K T K T A R L A D I Y I Q P K A G Y D  
R I A D R R L G F D H V R V A V L S T F T H R S M D L A D I P M V F K P G T D  
L R H L S G A R E R G G L V V V D P R R T A T A A L T D D E H V Q P L P G T D  
I K Q Y I Q G L Q N G A K L I V A D P R F S A S A A K A D I W V Q I K P G T D  
Q Q D L L K L A K R G C L V V V D P R M T R T A K I A N Q H L A I K P G T D  
R L A D R R L G T P G V K C A V L S T F S H R S M D L A D I P M V F K P G T D  
D R R L S N P H V K V A V L S T Y E H R S F E L A D I P I V F T P Q T D  
T H A I K A R K E R G A K I I V I D V Y D N A T M K Q A D L G L V L K P G T D  
D R R L G H P K R G V A L S T F T H R S S D L A D I P I V F K P G T D  
Q H I L T A K E E N K A Q I I V A D P R F T Q T A A F A N K F V Q F R S G T D  
A A E D D G C E L L V V D P I E S E T A E V A D A H V A P D P G G D  
A S D D D S E L I V V D P I E S E T V D D A D L H A Q V D P G T D  
G A Y I K R A A R R G A R L I V A D P R R T G L V I E H A S L H A P V K A G A E  
I Q R A L D R G A K L I V I D P R K T E M A Q K A D V H I Q L P P E H N  
T P L L K E A R H N G A K I V H V D P Y A N L T S R F A D E H V K L R P G S D  
F R K A G E R T V V V I D P R R T E T A K Q A D I H L Q L R P G T D  
R R L S N Q N V T V A V L S T Y Q H R S F E L A D N G I I F T P Q S D  
A G P T P R L L C V D P R R T R A A V I E S G G V H L A P L P G T N  
A I N I W G Q V M D Q A K V A I I D P R L S A T A A K A D E W L P V I P G E D  
L T A A R A N G C K V T V M D V R A T V S A A K A D T F F V R P G T D  
L G M L E A R R T G A A L V V V D P R A I D L V R H A D V W L R L R P G T D  
Q A K K A G A R F V F I D S W F N P S M Q V L A D E W I A V R P G T D  
K Q R I R D V R R R G G R V V V I D P R R T E T A R L A D Q H V P I S P G G D  
A R R V L K A K E N G A K V I V C D P R K I E T A R I A D Q H L Q I L N G C N  
S R G E Q V L L I D I L T R R T R T S A F C Q H T L Y F K P N T D

	250	260	270	280
UniRef90_UPI0003F63F17	V A L M N G L L R E I I T N G W I D E D Y I D S H T V G F D E L R Q R V E Q Y T	I N E D L Y D H D F V E N W C S G F D E E L E E R V V Q E Y P	E S C T N G Y E E Q V A E E T V E K Y T	
UniRef90_G9XU05	C A L A M G M L N V I I K N E D L Y D H D F V E N W C S G F D E E L E E R V V Q E Y P			
UniRef90_T0IWZ6	I A L I N T G I M R L I I K N E D L Y D H D F V E N W C S G F D E E L E E R V V Q E Y P			
UniRef90_UPI00037D72D4	V Y L L Y N G V I M R L I I K N E D L Y D H D F V E N W C S G F D E E L E E R V V Q E Y P			
UniRef90_I0H3D9	A Y L L F G M V H T L F D E N L T D L R F D L A G L V T G V E Q V R E L A A D F A			
UniRef90_R4X184	L A I M N Y I A N Y I I T K N G D A V N R W F F V I N A H T N F R K K G A T D I L G Y G L R			
UniRef90_K9GZB5	L A I L N F I A N Y I I T K N G D A V N R W F F V I N A H T N F R K K G A T D I L G Y G L R			
UniRef90_A4EXJ0	V V L A M G L A A E L E Q N R G A L D L S F I D K W V T G F D A Y M A Q A R Q Y S			
UniRef90_UPI0003FCBA32	K Q L A L L L E T Y I L I T T N G R Y D K D F V C R R E R T S G Y D E L R D M L			
UniRef90_W7SVV2	L A L A L L G I H Y I I T T N G R Y D K D F V C R R E R T S G Y D E L R D M L			
UniRef90_R4LKN0	L A L M N G L T R E L F V N G W V D R S W V Q A H T L G V D D L R A T V E P Y T			
UniRef90_B8DLD3	A F L A M A V T K L I V R A G G E D R E F M E A E R T N G F D A A V R R S V E A A W W			
UniRef90_I0LC12	L A V A N A L L H I A L V R A G G E D R E F M E A E R T N G F D A A V R R S V E A A W W			
UniRef90_W1JRT3	I P V L Y G M M W H I L K N G W E D K E F I A Q R V Y G F D D L R K S V E A K W N			
UniRef90_D7C0X4	L P L A H A V G R E I I H S E Q L T N D G A F I D R D R A T S G F E E Y A A E V P W T			
UniRef90_Q65NC5	A A L A N G M L K I I E S E Q L T N D G A F I D R D R A T S G F E E Y A A E V P W T			
UniRef90_Q07WV3	A A L C E G I A Y E M I S S G W V D K N F L D R K F C V G Y D K E S L I N L K A E			
UniRef90_C8PYN5	T H L F V G L L N Y L H A S N G Y A N H D Y L R H C D N L A D A L A			
UniRef90_U1PHV0	L A L A R A V L A V I I A S N G Y A N H D Y L R H C D N L A D A L A			
UniRef90_X1FP41	V A L L M G M M R V I V D E G L L D A A F I E E R C E N L D A F K Q A L N D F D			
UniRef90_E1SB11	S A L F S G L L H W L A Q N D G L D A S M L P H L N G V S E T L A A A A Q W D V			
UniRef90_H1FS40	I P F M Y G M L H I A F K N N W H D E K F I K D R V Y G M E D I M E E A K W H			
UniRef90_D0CVM2	L A I L N Y I A N Y I I Q T G A V N E E F V K N H V N G K L E E I S F E E Y A A			
UniRef90_D4H8U3	L A F V L A L N V I I S E N L H N Q D F V N E Y T H G F E E L K A H V I K Q Y T			
UniRef90_UPI00037A3882	A A M M A G M A H Y I F T E N N L H N Q D F V N E Y T H G F E E L K A H V I K Q Y T			
UniRef90_Q1Z843	M A L V N A L A N V M I T E N N L Y D K S Y V Q K H T E G F D D F R K L V A N Y T			
UniRef90_U5WTE2	V A L M N G L L H E I I E H G W V D R E Q Y D A H T V G F D E L R N R V A E E P			
UniRef90_G8QFB2	L A I L N Y I A N Y I I E Q N G A V N Q D F V D A N H V K F K G V T D I G Y G L R			
UniRef90_K8ZQZ9	A A L V A G L A W V M I N E N L V D Q A F I D T Y C I G Y H Y K A Y I L G N G D			
UniRef90_B11F3	L A L L L G M A R A I V D E K L H D E G F I R E R T T N F D A F Q K S L A D F T			
UniRef90_UPI000349134F	S A L A L G L M H E L V D E N D W L D H D Y L A R H V G F G W P E L R E R A L Q W P			
UniRef90_D6SM83	V A L L N C I M N V I I Q E N L A D K T Y I D A R T Q G Y P A L A R S L E G Y T			
UniRef90_R7PHB7	G A L A L A M M H V M E E N L A D R D F L A H R T N G Y E A F R K S L A P Y T			
UniRef90_D5V743	L M V L N M M A Y V I L E N E K L A N N E F L D T R C G F E E Y K S I L N D			
UniRef90_I3CCR3	V P F I W G T L W H I F Q N G W E D K D Y L H Q R V Y G L E D V R K E V E K W T			
UniRef90_M7CQ42	A L L M A M V H T L F D E D L V D P G P A E R L V K D I D L L R L A S V P Y T			
UniRef90_L1KHF0	V A L L N A L H E I I R T D R V D H D Y I E A H T V G F D E L L A S R V R D R T			
UniRef90_F8D3F8	L A L A R A V L A R V V E T G R V D E E F V A A A T E G F D D L R A E L P D A E			
UniRef90_D8F4G9	C A I A L A M M V I I T E E L W D K E F V D K W T S G F D K L T E S V R K A Y T			
UniRef90_G8TT95	I A L F N A M A H V I I R D G L V H Q G F V R R A T V G Y E N F R E S V R S W T			
UniRef90_F7UYF7	L A I A N C I A N Y L V Q N N L Y D A A F V N D H L Q F K Q G T E N I G N P T D			
UniRef90_E6TJF1	A L L L S L L Q V M F A E G L A H T R E I D A V A D G G S A W L R A Q V A P F T			
UniRef90_W7IWI3	A A L L L A M V R T I L A E D S A D P P S Y V D Q L D V V R D			
UniRef90_UPI00035FOCC4	M A L M N T L L H E I L E C G W I D R D Y I A A H T I G F D E L A T T V A P W P			
UniRef90_UPI00036DF337	L A L A L G L L L V V A Q G R T D R E Y I E R E T S G W E A R A A A M A S N A			
UniRef90_B8K6S8	V A L Y N G L L R Y C V D T A N I D Q E Y I E R H T S G F T K L L D S V A S N A			
UniRef90_T0D452	A L L A L G V L R V C R D L N L I D Q R F T Q T C A V G W D A F A K T L D A Y A			
UniRef90_F6AJN3	L L I L N Y I A N H I T Q S G A V N D G F V K R H T R F T W S D M S F E Q F A A			
UniRef90_B9M850	G A L A L G M H L V R Q D L V D H G F V A Q R V Q G F Q E L K D Q V L			
UniRef90_UPI0003600670	A A L A L G V M H E L F A H G W T D A A Y I A E A T Q G I D E L R D A A A E W T			
UniRef90_A0EJ3	L A I L N Y I A N Y I T Q D R V N D G F V S K H T K G G S P I D F E E Y K K			
UniRef90_D3FYD3	A A L A N G I K V I I E K G L I D H S F I E Q R V A G F D E V K S H V A S L D			
UniRef90_F4LR9	I P F L F G L L Y H I F K N G W E D Q A Y I D A R V Y G M D E V K A D I L			
UniRef90_J7LFF3	T A L A L G L A A R V Q G R C D E E Y L A E R T T G F D A A W E H A A A W W			
UniRef90_B8FV01	A A L Q L A I A Y T W I T E N Y D K E F I A E T H T H G F N Q F A D Y V L G K E			
UniRef90_UPI00041496CE	L A I L N Y I C N Y I I Q N K K V N T D F V K K H V N G K A E V I S F E E F A R			
UniRef90_I3REZ1	V L F A L G V A K V I I E E G L Y D A K F I K E H V Y G F E E F K N V V K R L S			
UniRef90_K9WCM8	Q A L V L A M L H V I L D E K N L H D A F V Q K W V L G F E E L K T H L			
UniRef90_UPI0002D77CF6	L A I A N F I A N Y I I Q N D A V N W D F V N K H T N G K L H P L D F E G Y K A			
UniRef90_X8BQS8	L P L A L A L T H L A V T E G F A D R A Y I A R T S G F D E F W A A A R W W			
UniRef90_UPI000405B275	G A L A L G V L K H C K D C G W L D E T F L Q R H A V G W A E F S A Y L D Q F T			
UniRef90_F7UVZ3	L A L L L G M A N V L I E E D L Y D H E F C E Q Y T E G F D E F A A E V K E Y T			
UniRef90_Q3AA07	G L L A L G I A R L L I S E G L Y D K A F V K E K V I N F D E F S R L T E E I T			
UniRef90_I4A6Q1	T A L L L G V A H T L I S E D L I D W E Y L K N N T I G F D A F K D Y V E L G T Y			
UniRef90_W0EC37	G I L A L G L A H I I L R E G W L D W E F V R N H V H G F E E F A L K A K E Y E			
UniRef90_M4UPG1	M A L V N A L A N T I F A E N L Q D Q V V I D K Y T D G L Q E Y K K I T S E Y T			
UniRef90_U6E9R8	Y Y L A M A L A K I I Q N N Y V D H D F I E N S T L Y F D S Y Q K I T L D K Y S			
UniRef90_Q8U7P1	L V I L N Y I A N H I I K T G R V N E D F V R R N H T K F K T E A I D F E T F K E			
UniRef90_K6WLA2	L Q L L L G L T H V V F A E S G L A D T D Y L R R R R V D G V G A V R R E V A Q W W			
UniRef90_A1SBQ9	I P F I Y G L T H V V F A E S G L A D T D Y L R R R R V D G V G A V R R E V A Q W W			
UniRef90_M1PCH9	T A Y M L A I M N Y L V Q N D K Y D K E F V E D H T D G F E Q F A			
UniRef90_K7RN92	L Y L L L G M L R H I I Q T E K L Y D S E F C N G K H T V G F E S V S I N N I E			
UniRef90_S9QDD6	L A I L N Y I A N H I I Q T G R V N E E F V N G K H T P G L M E D S N F E A F K E			
UniRef90_UPI00047B79B0	L V I L N Y I A N H I I K T G K V N Q D F V G K Y T S F K R G N D D I G Y G L R			
UniRef90_I5BRJ0	A A L A C A V M H V L F R D G L A D W A F L D R K Y T D D P R G L E A H L K T R T			
UniRef90_Q56350	L A I L N Y I A N H I I Q T G R V N R D F V D R H T T F V T P S T F E E F A E			
UniRef90_UPI00037607D5	V A L I Y G L M N V I L E N G W E D K S M I N D R T Y G Y S D L K E E L K R Y D			
UniRef90_W0JTA8	L E L A R A V L A R L V E T D R I D E P F I A D A T T G F K D L R A Q L P D A E			
UniRef90_B9LNQ6	L A F A R A V L A Q T V A D D A V D R E F V A E A T T G F E A T V D S L P S V R			
UniRef90_E1QE75	V A F V N G L M R V L M E E G L Y D K D Q A L K R A A D F E K L R R T V E R Y N			
UniRef90_UPI00046801A3	L P I L N A L L N H I T A S N L C H D D A F I A N Y T T G I E Y V K E A V K E Y T			
UniRef90_D7BG58	G A L A Y A L A H V I L R E S G L H D A F I G R A A Q G F A E Y R A A A E A W T			
UniRef90_UPI0003B3AE7D	A F L M S A I L A I V R D N L H D R D F L A R H C H G F E A I E A Q L R S I P			
UniRef90_V6PC80	L V I L N Y I A N Y I I Q N D A I N Q D F F S D A H T V N D A S E P M S F E D Y K A			
UniRef90_F4CUS7	L A L M N G L L H Q V I A N D A R I D H G Y V D A H T V N D A S E P M S F E D Y K A			
UniRef90_UPI0002F001ED	G A L A T A M A H V I L K E G L W S R E F V G D F V D G V N H F V P G Q W W N L			
UniRef90_E5Y3B6	Y A M N L A V L R V L I S E K L Y D P H M L P Y L D G F G E L E E R S V A P C T			
UniRef90_UPI0004652A99	T A L L S A I A R V L I D E G L V D P A A V A A V T E D F T A F R E Q S L A F D			
UniRef90_R5FP01	T A L L L G I A H W M I T H D S Y D Q E F L D S H C V G F D A D H M Y V L G T Y			
UniRef90_K0EYK0	V Y L L L A M L H V L V T E N L C H D E R A I R A Q C T G W D E L R A L V G E A S			
UniRef90_K8CVE0	M A L V N A F G Y V L L E A A L Y D K E Y V A R Y T E G L D A Y R E T V K D Y A			
UniRef90_A9FEA4	L A I A N G I A H L L V E R G T F D R A F V D R F C N F R K Q P T S F E E Y K T			

UniRef90\_UPI0003F63F17 P E V V V A D I C G I P A D D L R H A A R V L G T A E R L M S T V L Q G  
UniRef90\_G9XU05 P E E V E K I T W V P K E T I E A A A R R Y A T A K P A A I Q W G L A  
UniRef90\_T0IWZ6 P E Y V E N I T G V P T Y L L H E A A K I Y G T A E T A Q I F Y T L L G  
UniRef90\_UPI00037D72D4 P S K Y T I E E A E K V T G V P A G K L I E F A E L I S Q K G V I F S W G L G  
UniRef90\_I0H3D9 P E K V T A A C G V P A E R I R D L J A R Q L A A A D R A A V Y G R I G  
UniRef90\_R4X184 P D H P P Q K A A A K N A Q K P I G D E F A Q F V S R Y D A S Y R V V S F W T M G  
UniRef90\_K9GZB5 P E H P L E Q A A A N A D K A G A S D P I D F E T F K A P S K K V V S Y W T M G  
UniRef90\_A4EXJ0 S D V V V E R C G I T P A Q F D T L C D L I V I S A E N M A C N F G N G  
UniRef90\_UPI0003FCBA32 H A N N V D M E T A F E D T G L S L Q D I Q E A A Y R F A S A P T M I L T A R G  
UniRef90\_W7SVV2 H A G Y T V Q W A A G V E T G V P A S T I Q R I A E D Y A A A K P A A I F C N A G  
UniRef90\_R4LKN0 P D E V A R I C G I D P D D L R R A A R I F G E S G A V L S T V L Q G G  
UniRef90\_B8DLQ3 V D D L C A R C G V N V A D A E F L A A D T M L R Q R P T S I L L G W G  
UniRef90\_I0LC12 P A R A E Q L S G V P V A D L E A T A R A L G T G G R V I I L T A R G  
UniRef90\_W1JRT3 P Q E V E R T L G V P A A Q L E R V J A K M F A T V K P A T I I W C M G  
UniRef90\_D7C0X4 L S V A E K V T G V P A A A T R D L A H A Y A T A E R A Q L C W T L G  
UniRef90\_Q65NC5 L E D I S A K T G V Q I E Q I K K A A V K F A R E E T G M L F T A R G  
UniRef90\_Q07WV3 F E I S E D P E K K A Y I P Y I N P N D N Y K D Y K L M N A R A P F I V I A G A G  
UniRef90\_C8PHY5 S D S W T I K K V A K C G V N E S D L T N F Y Q L F A T T K N T V S F Y S M G  
UniRef90\_U1PHV0 S D S W T I K K V A K C G V N E S D L T N F Y Q L F A T T K N T V S F Y S M G  
UniRef90\_X1FP41 L D F V I E P V C G V P R D K I A Q A A R M F A T N S P A T I L Y A M G  
UniRef90\_E1SB11 A R V A E T C D L T E Q Q V M H F F R L F S Q S H D R V L T L W C M G  
UniRef90\_H1FSA1 P K K V E D V T G V S A D Q L I Q I T T L Y A R S N P G T L I W A M G  
UniRef90\_D0CVM2 S V A D Y T L E Y V S E L S G V P A N Q L E R L A K E Y A D P K V M S L W T M G  
UniRef90\_D4H8U3 P E W A S N E C E I V S A S E I Y W T A R E F A K Y A P R S L J A Y P G  
UniRef90\_UPI00037A3882 D N T P K T P E W A S A L C G V S A E D I K K L A D L Y A T K P A A L K A S W A  
UniRef90\_Q1Z843 P E S V E T I T G L S A A E V R Q A A R T Y A A A P E A M I L W G M G  
UniRef90\_U5WTE2 P Q R A E T I C G V D A D D I R V C A A R L L G T A E R L L S T V L Q G G  
UniRef90\_G8QFB2 P N H P Y T L D K T H E I S G V P K E N L E A L A K A Y A D P K V V S Y W T M G  
UniRef90\_K8ZQZ9 D G I A K T P Q W A S H V T G I P A D R I T K L A R E I G T K P A Y I I C Q G W G  
UniRef90\_B11F3 V E K A A E I T G V P G A Q I R E A A R V Y A T T S K P A L L F W S E E  
UniRef90\_UPI000349134F P E R A A E V C G I S A D E V R G L A R D Y G T T A P A A I R L N Y G  
UniRef90\_D6SM83 P E Y G E E V T G V A R E K I I D A A R T Y A R A S K A G I Y Y T M G  
UniRef90\_R7PHB7 P A W A E G E T G L P A E V I A G L S R E Y A S A K A I L L G S G  
UniRef90\_D5V743 E F A N P E Y M K N L K G Y E Q L A E Q I P A I A R T Y A K K S M F F W G L G  
UniRef90\_I3CCR3 P A E V E R V T G V Q E A D V K K V A Q L M A E N R P G T F V W C M G  
UniRef90\_M7CQ42 P D A V S H R T G I E P E T I R E L A R Q L A Q T R K A A L Y S R M G  
UniRef90\_L1KHF0 P K W A A D L C D V P A A L I G E A A E L L G T A E R L L S T V L Q G G  
UniRef90\_F8D3F8 A A A E R A G V S I E D V D R I A A A L E D S P T L C Y W G M G  
UniRef90\_D8F4G9 P E Q V E I T S G V P A A D I K N V A R L Y A T T D G S C L L E G V C S  
UniRef90\_G8TT95 P E R A S A I T G V A P E R L V L A H R Y A K A P R A M I A W T L G  
UniRef90\_F7UYF7 D G Y P Y T F E Y T S E L S G V P V E D L Q E L A N V F A D P K V M S L W T M G  
UniRef90\_E6TJF1 P E V T Q S H T G I D P D T V R G L A R D L A A T P R A A V Y G R L G  
UniRef90\_W7IWJ3 A V I E G F T P E W A A P I T G I D A S T T E R L A R E F A G A R S A V C Y R T G  
UniRef90\_UPI00035FOCC4 P E R G A A V C G L D V E D I A R A A R L L G T S R R L V S T V L Q G G  
UniRef90\_UPI00036DF337 P E L V E R I T G V G V P R L R E A A A L F C D A P N A M V L T A R G  
UniRef90\_B8K6S8 F S I N E L S E Q L D L S Q E Q L K T F Y R W F A N T K K T I T L F C Q G  
UniRef90\_T0D452 L D R V S R E T N V I E P E Q I R A L J A E F Y G Q S G P V T T L L G I G  
UniRef90\_F6AJN3 F V K P Y T L E R A A R E S G V P A E R L K A L A E L Y A D P K V V S F W T M G  
UniRef90\_B9M850 P D Y S I L E K V A A I T G I A G E K I L E R L A R E Y G K E A Y I R L G S G  
UniRef90\_UPI0003600670 P E R T A A V T G L S T E E V R E F A R A I G T R P T Y I R V G Y G  
UniRef90\_A0EJ3 F V J A D Y D V D S V S E L C G V P K E N L E A L A E L Y A D P K V V S Y W T M G  
UniRef90\_D3FYD3 L E E I A R L T G V S E S K L I E Q A A T V F G K E E T G M I F T A R G  
UniRef90\_F4L8R9 A K W S P D K V E E A C G V D E A T M Y S V A K T M H E N R P T L V W C M G  
UniRef90\_J7LFF3 P E R T E R V T G V P A A D I R A A A D L L G R A A R D H A A Y I L T G R G  
UniRef90\_B8FV01 D G L P K T P G W A E I C G V P S R T I K A L A R E W A A R A T T I V H C N G  
UniRef90\_UPI00041496CE F V S E Y T L E K T A K L S G V P A E R L K R M A E L Y A D P K V V S F W T M G  
UniRef90\_I3REZ1 L N Y I A S E T G I S V I E F A R E F A E K R G L I H I G Y G  
UniRef90\_K9WCM8 V K Q G Y T P E W A E T I T G V P A G K I R Q I A E E Y A T K P A A I F C N A G  
UniRef90\_UPI0002D77CF6 S V A S Y T A E K A S E M S G V S V I E K L I E L A K Q Y A D P K V M S L W T M G  
UniRef90\_X8BQS8 P E R A E Q V T G V A V I S M Y Q V V Q T L C A A R D R G A G A Y V L T A R G  
UniRef90\_UPI000405B275 L D V V I E Q E T D V P I E H I V R L A E F Y G T T R P V A T L L G L G  
UniRef90\_F7UVZ3 P A W A E K I T D V P A A R I E E L A R A M A K A P A A S I E A G W R S V I G  
UniRef90\_Q3AA07 V E K V L K E T G L S E D D L A Y L A K L F A F K K P I A V L I G Y G  
UniRef90\_I4A6Q1 D G T P K N A E W A S E I C G V E P A Q R I R Y L A R A M K N K K V A I I F G W A  
UniRef90\_W0EC37 P A R V S E L T G I S E V K M N A L A R R I S H S G P V S F L P G Y G  
UniRef90\_M4UPG1 P E K V A S I T G L E P E D I R R V A R T Y A S A S E S M I L W G M G  
UniRef90\_U6E9R8 L D I L S H K C G V E V D V I R K L A V S Y A E G D P S S I I M G W G  
UniRef90\_Q8U7P1 F V S E Y T L E K T A A M T G V I E A G F L E E L A E L Y A D P K V M S L W T M G  
UniRef90\_K6WLA2 P E R V E R E T G V P A D L L R R A A H L L A A A P G R G G A G Y V L T G R G  
UniRef90\_A1SBQ9 P E E V E N V V G V S K A Q M Y R V A K M M A E H K P G T I V W C M G  
UniRef90\_M1PCH9 S I K E W T L E K A A K E C D I P A A Q I K E V I A E M L A A N A P N V A I H P G  
UniRef90\_K7RN92 L D T C I A S T D I P L A T I H K L A E E F A K S D G A F I T T R V G  
UniRef90\_S9QDD6 H V I S T Y T L D Y V S E L S G V E P G F L E E L A E L Y A D P K V M S L W T M G  
UniRef90\_UPI00047B79B0 P D H P Y T L E K T V Q M T G V I E R G W L E E Q L A E L Y A D P K V T S F W T M G  
UniRef90\_I5BRJ0 P E W A S A I T G L S V D E I E T F A R L V I G E T K R T F F R L G Y G  
UniRef90\_Q56350 L V I S E Y T L D K V S E L S G V E P A F L E Q L A E L Y A D P K V M S L W T M G  
UniRef90\_UPI00037607D5 L E T V I S D I T G V P V A D I K H A A R L M A E N R P G T L I W A M G  
UniRef90\_W0JTA8 P A A N A A G V P L E T V D R L A D A L E R D T L L Y W G M G  
UniRef90\_B9LNQ6 E A A E T A G V S V E T V E R V A E A M T D S A L V Y W G M G  
UniRef90\_E1QE75 P E M V A A V A G V G P E L L V E L A H A L A T T K P A M L V H A L G  
UniRef90\_UPI00046801A3 P K Y V S E L T G V P Q E L L E K A A H L Y A T V K P A A L T H G M G  
UniRef90\_D7BG58 P E R A E A V T G V P A A T I E R L A L E F A Q A R A S L I R T S Y G  
UniRef90\_UPI0003B3AE7D V E D Y V R R A D V P L A D V E R V A R G Y A S A R R G C V R I D L G  
UniRef90\_V6PC80 F V J A E Y T L E K T A E M T G V P K D Q L E Q L A Q L Y A D P K V I S Y W T M G  
UniRef90\_F4CUS7 P G R V A D L C G L D A E E I R A A A R L L G S A E R L L S T V L Q G G  
UniRef90\_UPI0002F001ED E L K D R T P E W A E R S G I P A E Q I T R V A K E F A A P R V I S W V S P G  
UniRef90\_E5Y3B6 P E W A E T E T G I K A D R I V R L A R E L A E A A P R V L W Y P G W F  
UniRef90\_UPI0004652A99 P D T V A A I A E V P A E A I R K A A R I J G R A R N A F Y T M G  
UniRef90\_R5FP01 D G V P K N S T W T S I I C G V P K Q R I V S L A K E M A N T K P M T M A S Q A  
UniRef90\_K0EYK0 P E L L A P H A G V D A E V I R E L A R A H A T A S S A V L Y A R I G  
UniRef90\_K8CVE0 P E A V E H L T G V S A Q Q I R Q A M R T F A A P S A T I M W G M G  
UniRef90\_A9FEA4 E L A E Y T P E R V E A I S G V A A K D I R M L A D L F G R R I T S L W C M G



UniRef90\_UPI0003F63F17 F Y Q S H Q A T A A S V Q V N N L H L I R G M L G R P G C G L L Q M N G Q P T A 330 340 350 360  
UniRef90\_G9XU05 I D Q Q V T G T A T A Q A V N S L W A I T G N T D V P G G N I I A K S G Y N V D  
UniRef90\_T0IWZ6 L S E H G C G T D D A V M S L A N L T L L T G N V I G F S P N T G V N P M R G Q N N V  
UniRef90\_UPI00037D72D4 I L S E H G G G V D T D A V R A Y L N L M L L T G N V I G F S P N T G V N P M R G Q S N V  
UniRef90\_I0H3D9 T C T V E F G T L A S W L I D V L N V L T G N L D R P G G V M F P L R  
UniRef90\_R4X184 F N Q H T R G T W A N N M V Y N L H L L T G K I A T E P G N S P F S L T G Q P S A  
UniRef90\_K9GZB5 F N Q H T R G T W A N N L V Y N I H L L T G K I L S E P G N S P F S L T G Q P S A  
UniRef90\_A4EXJ0 I E R G R S G G S G L R A A M A L P A L T G H H G R P G A G V L A K S G G A T P  
UniRef90\_UPI0003FCBA32 I S H Q Q L I N G A F E T Y R V L A F I L L L T G K I G R K Y A C G Y G A T G Q A N G  
UniRef90\_W7SVV2 V S H Q Q L I N G A F E T Y R V L A F I L L L T G K I G R L G V G G C N F M  
UniRef90\_R4LKN0 F Y Q S H Q A T A S A V A V H N L H L L R G L I G R P G S G I L Q M N G Q P T A  
UniRef90\_B8DL3 M H R H E A A H L S I R A V D A L G A L S G N I G V P G G G V S Q G  
UniRef90\_I0LC12 A E Q H A K G V D T V S A V V N L A L A L G L P G R E G S G Y G C L T G Q G N G  
UniRef90\_W1JRT3 Q T Q H T V G T A N V R A S C I A L L M T G N V I G K A G A G A N I L R G H D N V  
UniRef90\_D7C0X4 I T E Q H H N G T D N V R A L I N L S L L T G H V I G R H Y A C G L Q P L R G G N N V  
UniRef90\_Q65NC5 I V E Q Q T D G T A A V R A L I N L S L L T G K I G K Y A C G Y G A V L T G G Q N G  
UniRef90\_Q07WV3 I N R H A N G E Q A M R S C Y M L S F L T G K V I G Q G V S N G A L P S Q G S L  
UniRef90\_C8PYN5 V N Q A S N G T G K V S I I N C H L Y T G K L G Y Q G G A G A F S I T G Q P N A  
UniRef90\_U1PHV0 V N Q S I N G T G T A R A L I D L C L A T G N L G P G S G P F S L T G Q A N S  
UniRef90\_X1FP41 I T Q H S H G T D N V M A T A N L V M L T G N V I G K P S T G V N P L R G Q N N V  
UniRef90\_E1SB11 I N Q S A T G S D N N Q A L I N L H L L T G K I G R A G C G P F S L T G Q P N A  
UniRef90\_H1FSA L T Q H S V G S D N N R L A P L Q L A L G N M G V I G G G T N L R G H D N V  
UniRef90\_D0CVM2 F N Q H T R G S W V N S L M Y N V H L L V G K I A E P G N S P F S L T G Q P S A  
UniRef90\_D4H8U3 T S W Y V N D V Y F R R A C A L L S A L C G C W D T E G G F P Y E Q A E S R I  
UniRef90\_UPI00037A3882 P G R N A Y G E Q Y N R M A A L Q A M T G N I G V L G G C S E G I G K A W H A  
UniRef90\_Q1Z843 V T Q Y Q A V D V V R G L A S L A L M T G N F G R R G V G C G P V R G Q N N V  
UniRef90\_U5WTE2 F Y Q S H Q A T A A V V Q V N N I H L V R G M L S E K P G C G I L Q M N G Q P T A  
UniRef90\_G8QFB2 F N Q H T R G T W K N N M I Y N V H L L V G K I S E P G N G P F S L T G Q P S A  
UniRef90\_K8ZQZ9 P Q R Q A N G E L T S R A I A M L P I L T G N V I G I N G G N  
UniRef90\_B11F3 I A Q H P A G G Q D S V R V L A Q L A L M T G N Y G K P G A G F V P L I G R S N F  
UniRef90\_UPI000349134F M Q R V A G G G N A R L I A L L P C L V G A W R H R A G G L L L S A S I S G W  
UniRef90\_D6SM83 I T Q H T H G T D N V F A I A N L A L M T G N L G R R S T G V N P L R G Q N N V  
UniRef90\_R7PHB7 P S R Y G N G G Y A T R L I T L S A Y T G A W R P G G L C G C N P G A G P  
UniRef90\_D5V743 I T E H L D G S Y A V M A L T H L A M L T G N I G K S G A G L M P L R G Q N N V  
UniRef90\_I3CCR3 G T Q H T V G N N T R A Y C I F Q L V L G N M G V S G G T N I F R G H D N V  
UniRef90\_M7CQ42 T S T A F G G L A T W L S Y C L N I L T G K L D T V G G M L E T Q P A I D L V  
UniRef90\_L1KHF0 V Y Q S H Q A T A A V Q V N N L H L L R G M L G R P G A G V L Q M N G Q P T A  
UniRef90\_F8D3F8 I N Q S V N G T A A S G A L I D L C L A T G N L R P G S G P F S L T G Q A N S  
UniRef90\_D8F4G9 T N Q S I N G L Q T H R A N A L Q S I T G N V D V P G G W V  
UniRef90\_G8TT95 I T E H H N A V D N V F S L I N L A L L T G H V I G R H S G L N P L R G Q N N V  
UniRef90\_F7UYF7 V N Q H N R G T W M N H N I Y N I H L L S G K I A Q P G N G P F S L T G Q P T A  
UniRef90\_E6TJF1 T C V G R Y G T L T S Y L I D V V D L V A G N I D V P G G S V I V G Q G M P A Q  
UniRef90\_W7IWJ3 V S M Q Q H G A V C Q W A I Q V L N V L T G N I D R P G G A L V T K P A V D  
UniRef90\_UPI00035F0CC4 F Y Q S H Q A T A A V Q V N N I H L V R G M L G R P G C G V L Q M N G Q P T A  
UniRef90\_UPI00036DF337 P E Q Q S K G T D T V G A W I N A L A T G N A G R P L A G Y G C L T G Q G N G  
UniRef90\_B8K6S8 V N Q S Q S G S D K A N A I N A H L A T A K I G V K G A G P F S L T G Q P N A  
UniRef90\_T0D452 M Q R Y A G G G N A I R A I D A L A A A T G N V I G L P G G G V N Y A  
UniRef90\_F6AJN3 F N Q H T R G G V A W N N L Y N I H L L T G K I S E P G N S P F S L T G Q P S A  
UniRef90\_B9M850 L S R Y G N G A M T I R T A C L P A I T G A Y G R E G G S P F P G T S T G  
UniRef90\_UPI0003600670 M T R H E F G G T N L R A V T L L P A L T G D W R L R G G G V T L S T G G A F A  
UniRef90\_A0EJ3 F N Q H T R G T W A N N L V Y N I H L L T G K I S E P G N G P F S L T G Q P S A  
UniRef90\_D3FYD3 I V E Q Q T D G S I S V R N F L N I L A T G K V G K A Y S F G A V L T G Q G N G  
UniRef90\_F4L8R9 Q T Q H S I G N A M V R A S C I V Q L A L G N V I G K S G G A N I F R G H D N V  
UniRef90\_J7LFF3 T E Q H S K G T P T V S A W I N L A L A L G L P G R R G S G Y G C L T G Q G N G  
UniRef90\_B8FV01 L A M Q G L G K P G R N Q L K M I E W G L F N M F D Q I P H P P E I L P N V E  
UniRef90\_UPI00041496CE F N Q H T R G T W V N N M I Y N V H L L T G K I S T P G T G P F S L T G Q P S A  
UniRef90\_I3REZ1 F Q R S L A G G E A L R A I S L L P A L V G H K F  
UniRef90\_K9WCM8 I S H Q L N A F D T Y R L A S F L A A V T G N I G V N G G C N F M  
UniRef90\_UPI0002D77CF6 M N Q H T R G V W M N S L V Y N I H L L T G K I A T P G N S P F S L T G Q P S A  
UniRef90\_X8BQS8 A E Q H R D G T D T V R A V I A L A L V L G L C G R P G S G Y G C V T G Q A N G  
UniRef90\_UPI000405B275 M Q R Y P G G G N A I R A I D A L V A A T G H V G I P G G G V N Y A N R M S E  
UniRef90\_F7UVZ3 C S Y A N S L E T A R A I T A V N A L L G A W G A K G G A L I T S S P K A G K  
UniRef90\_Q3AA07 L Q R Y Q N G G N T V R A I N A L I A L T G N V I G V K G G G P N Y A H P L W K P  
UniRef90\_I4A6Q1 S A R T Q N A D S L P Q L V M T I G A M T G H M G K S H M C G V S C H T G S S  
UniRef90\_W0EC37 L Q R Y V Q G G N T L R A I D A L A A L T G N I G K P G A G V Y Y A H Q D H Q D  
UniRef90\_M4UPG1 V T Q Y G Q A V D V V K G L A S L A L I T G N F G R R G V G C G P V R G Q N N V  
UniRef90\_U6E9R8 L H R Y Q Q G H L I F R M V D A L A A I T G N I G  
UniRef90\_Q8U7P1 F N Q H V R G G V A N Q M V Y N I H L L T G K I S E P G N S P F S L T G Q P S A  
UniRef90\_K6WLA2 A E Q H A H G T D T V T A A I G L Q L A L G L P G V S G S G Y G C L T G Q G N G  
UniRef90\_A1SBQ9 G T Q H H V I G N A N T R A Y C I L Q L A L G N M G V S G G T N L F R G H D N V  
UniRef90\_M1PCH9 R H V S W H G N D F Q R E L A C L T G I L G A Y Y V K G G W V P A K G P K V I G G  
UniRef90\_K7RN92 V Q T S R N S T L T E W A V V L N A I T G N I D R L G G L F  
UniRef90\_S9QDD6 F N Q H V R G V W A N Q M V Y N I H L L T G K I S E P G N S P F S L T G Q P S A  
UniRef90\_UPI00047B79B0 F N Q H T R G V W A N N M V Y N I H L L T G K I A T P G N S P F S L T G Q P S A  
UniRef90\_I5BRJ0 F T R N R N G V V N M H A A L S I A A V T G C W Q Y E G G G A F H S N S G I F R  
UniRef90\_Q56350 F N Q H V R G V W A N Q M V Y N I H L L T G K I S E P G N S P F S L T G Q A S A  
UniRef90\_UPI00037607D5 G T Q H A N G T S N T R S Y A A L Q L V L G N M G K P G G G C N I F R G H D N V  
UniRef90\_W0JTA8 V N Q S V D G T Q T A A A L I D L C L S T G N L G P G T G P F S L T G Q A N S  
UniRef90\_B9LNQ6 V N Q S V G T A T S R A L I D L C L A T G N L R P G S G P F S L T G Q A N S  
UniRef90\_E1QE75 P D E G A R G L D K A L J A Y A D L Q L L G N V I G R E C G G V N L L R G R G N A  
UniRef90\_UPI00046801A3 M T H F N H G V G N V F S V S N L F L I T G N L G V V G A G N Y P L R G Q Q N V  
UniRef90\_D7BG58 V T R H P G G A S Q R A V I L L P A L I G A W Q Y R G G G A L L T T  
UniRef90\_UPI0003B3AE7D I Q Q T L H T T L N G Y L E K L L Y L V T G H F G K A G G N N L H  
UniRef90\_V6PC80 F N Q H T R G V W A N N L V Y N I H L L T G K I S E P G G C G P F S L T G Q P S A  
UniRef90\_F4CUS7 F Y Q S H Q A T A A V Q V N N L H L L V R G M L G R P G C G I L Q M N G Q P C G  
UniRef90\_UPI0002F001ED T A M Q I R G G Y S C M A A H A L N G L V G S V Q N V G G T L G K M S V P K N S  
UniRef90\_E5Y3B6 T A R Y A D S F V T V R S A Y L I N A L L G S I G A R G G M P I S L S P K E T G  
UniRef90\_UPI0004652A99 V T Q H T S G T S N V L J A V S N L A L L T G N I G R P R T G V N P L R G Q N S V  
UniRef90\_R5FP01 P A R S D N G A T F V Q A F Y T V G W M T G N V I G F P G G E P L V R P G F K G C  
UniRef90\_K0EYK0 V C Q Q V T G T L T H W L V N A I N A V T G N L D R A G G Q M F A  
UniRef90\_K8CVE0 V T Q F G Q A V D V V K G L S S L A L L T G N L G R E H V G V G P V R G Q N N V  
UniRef90\_A9FEA4 M N Q H T R G T A L N D L V H G V H L L S G H F G K P G D A P T S L T G Q P S A

UniRef90\_UPI0003F63F17 E N T R E C G F R N W S N D D H I A E L J A E L W N I D K N Q I P H Y G P P T H A  
UniRef90\_G9XU05 D G Y S C G Y S W L T P E M Q E K R F G N E N N P L K K Y G L A S T A H G D S L  
UniRef90\_T0IWZ6 Q G A C D M G A L P N R L P G Y Q K L V V Q D K F E K A W G V K L S N K V L G L M I  
UniRef90\_UPI00037D72D4 Q G S G D L L K P W Q V L P N G P L T P E N A E R L S R I W G F P V P L E R M G L  
UniRef90\_I0H3D9 A A H L S L G K P G K R T G F T V I G R W H S R V R G F P E V K G E L P I A T L  
UniRef90\_R4X184 C G T A R E V G T F A H R L P A D M V V T N P K H R E E A E H I W K L P E G T I  
UniRef90\_K9GZB5 C G T A R E V G T F A H R L P A D M V V M N P D H R A Y A E K V W E K P G Y H A  
UniRef90\_A4EXJ0 K T T D R L Q Q S Q L T K P G T R V F N I V D L A  
UniRef90\_UPI0003FCBA32 Q G G R E H G Q K A D Q L P G Y R F I D N P E H R R Y I A D I W G P D K G V S A  
UniRef90\_W7SVV2 Q N N R E C G F R N W D N E Q H V R E L J A K L W N V D P L T I P H W A P P T N A  
UniRef90\_R4LKN0 F E E Y G P Y D Q Q Y W G D G L N P P R R T L L L P E I  
UniRef90\_B8DLD3 Q G G R E H G Q K A D Q L P G Y R K I D D P A A W G V P A D D L P G P V P A Y  
UniRef90\_I0LC12 Q G A T D V G L D I V T L P F Y Y G L A E G A W K H W S R V W E V D Y E Y  
UniRef90\_W1JRT3 Q G G G D M G A L P N R L P G F Q D I L D P A F E T A W D V V L Q P R Y G L N L  
UniRef90\_D7C0X4 Q G A R E H G Q K A D Q L P G Y R S I E N A D R A Y I A D V W G P G K G V S A  
UniRef90\_Q65NC5 S R S G M S G L S N P I K E S I S C F T F P D A I E R G H E M T T R K D G I R G  
UniRef90\_Q07WV3 M G N R E V G A S H F E L K N D H R Q T V A N F W Q A P T S I S G K D G L K A  
UniRef90\_C8PYN5 M G N R T W P G H R T F N D S A N R K I A D T W D V P F S R L P K S P G P G F  
UniRef90\_U1PHV0 Q G A C D M G A L P N V Y P G Y Q P A I R E K F E I A W G C S L P S S P G L T L  
UniRef90\_X1FP41 M G G R E V G G L A N H M S F T D E D C D R V Q R F W R S P A M A R Q P W L T A  
UniRef90\_E1SB11 Q G A T D M C C L S H T L P G Y Y G L S S G S W K Y F A K S W G V D Y E L A K  
UniRef90\_H1FSA1 C G T A R E V G T F A H R L P A D M V V M N D E H R K I A E T K W N I P E G T I  
UniRef90\_D0CVM2 D V I A S Y G A F A N N L P D D E R S S S G L P K D S C T Y L S E K D G S W T R L  
UniRef90\_UPI00037A3882 E G V A Y P Y D E F A N V F Y E S I K S D R W A H C V L N Y P N V K R E D I G L  
UniRef90\_Q1Z843 G G T C D M G M L P H Q F P G Y Q D V L R E K F E N A W G V S L S G K P G Y R L  
UniRef90\_U5WTE2 E N T R E C G F R N W S N D E H V A D L A R V W N I E P Q Q I P H Y A P P T H A  
UniRef90\_G8QFB2 C G T A R E V G T F A H R L P A D M V V V N P K H R E I T E K L W K L P A G T I  
UniRef90\_K8ZQZ9  
UniRef90\_B11F3 Q G A L D L D V T H P W S L V S K E K V A D A W G C A V P E P A G S  
UniRef90\_UPI000349134F Q G S T D M G C V P P F Y P G Y Q P E V K A R F E R L W R A Q L S S T P G L T A  
UniRef90\_D6SM83 Y V D D R L V T R P D F R E K P G R R V N I N E I A  
UniRef90\_R7PHB7 Q G A C D V G C L P Y Y D P D Y K E P K E V G L M T  
UniRef90\_D5V743 Q G A T D F G L D T T T L P G Y Y G L A D G A W K H W A R V W S V D Y E W L K S  
UniRef90\_I3CCR3 T L G A M S G Q K H F D K R S R V R D L P E F A G E Y P A S T M  
UniRef90\_M7CQ42 Q N T R E C G F R N W Q N D S H V A D L A K V W N V D P K T I P H Y A P P T H A  
UniRef90\_L1KHF0 M G T R V C W P G H R P F D D P E H R R A V A D H W N V P E P R L P A D P G P G  
UniRef90\_F8D3F8 M L P L T D M R L P V E E K P L G A E E F P V F Y Q F G K R P A P Y G S S L L  
UniRef90\_D8F4G9 Q G G G D M G A L P N R L P G F D P V V R Q R F E D A W G V P L D P E S P G L N Q  
UniRef90\_G8TT95 C G T A R E V G V F S H R L P A D L V V N N Q H R R Y T E A L W Q K P G F H T  
UniRef90\_F7UYF7 R L V N I G M G A L R R T Y R R Q R S R I G G F R A I L G S E P A A L M  
UniRef90\_E6TJF1 V L K M V S P G H F G A W R S R V R G L P E F A G E L P V A V L  
UniRef90\_W7IWI3 Q N T R E C G F R N W A N K N H V T E L J A R L W N V I P E T L A H D G P P T D A  
UniRef90\_UPI00035FOCC4 Q G G R E H G Q K A D Q L P G Y R K A R A H V A G V W G V D P D S L P G P G R S  
UniRef90\_UPI00036DF337 M G G R E V G G L A N Q L A I H R G F D D E S I E F W Q T D N L A S K P G L K A  
UniRef90\_B8K6S8 Q R G M A A F V D E D A L T G R S A A D V R E F V R G T  
UniRef90\_T0D452 C G T A R E V G T F S H R L P A D L V V T N P K H R A T A E K L W K L P A G T I  
UniRef90\_F6AJN3 P A F A M K E V T R E D F M A A P T R I V N M N Q L  
UniRef90\_B9M850 L N R A R V G G A D L L K P E T P R V N M N E L A N A L T P E N G L G  
UniRef90\_UPI0003600670 C G T A R E V G T F A H R L P A D L V V K N E G H R T F S E K V W K I P Q G T I  
UniRef90\_A0EJ3 Q G A R E H G Q K A D Q L P G Y R H R E Y V A N L W G V K E K D L P R K G V S A  
UniRef90\_D3FYD3 Q G A T D V G P N P D S L P G Y Y G L A E G S W K H F A N T W G V D Y E W L K D  
UniRef90\_F4L8R9 Q G G R E H G Q K A D Q L P G Y R H I E D P E A R D H V A R V W P G P G R S A F  
UniRef90\_J7LFF3 G A Y H G W Y F T P Q K F I P K T L V P E A L R D E P I T W Y G T I A G F  
UniRef90\_B8FV01 C G T A R E V G T F S H R L P A D M V V T N P E H R K H T E E L W Q L P E G T I  
UniRef90\_UPI00041496CE G F L Y D M K T L D K S Y A E G K F L R K K P E N K L P Q  
UniRef90\_I3REZ1 H N T W P G G L N L P A I E G N P P K K D V A L P V G P D Y  
UniRef90\_K9WCM8 C G T A R E V G T F S H R L P A D M V V K N P K H R A I A E K I W K L P E G T I  
UniRef90\_UPI0002D77CF6 Q G G R E L G Q K A G Q L P G Y R K I T D P A D R A H I G K V W G V D P M S A C  
UniRef90\_X8BQS8 F L N D S A L T A R D G A D V R E F S R G Q  
UniRef90\_UPI000405B275 L T D T R F A D P E K P Q P R V G A K E F P L A L J E S A G T N  
UniRef90\_F7UVZ3 Y F G S I V K A E E K V R E Y F P W V  
UniRef90\_Q3AAQ7 N G G P G K D G L P S V E N P V D D S L N H T E M W R A I V D G K Y N F T G Q M  
UniRef90\_I4AEQ1 H L N T V R L P E E H Y Q V R R F P H P L  
UniRef90\_W0EC37 Q G T C D M G M L P N L Y P G Y Q K V V R E K F E S K W G V P L S A E E G D K I  
UniRef90\_M4UPG1 V S G G V S Q G F E Y A Y F D F S V E L E G E N Q R K I P M P T I  
UniRef90\_U6E9R8 C G T A R E V G T F A H R L P A D M T V T N P E H R K H A E E I W R I P H Y H A  
UniRef90\_Q8U7P1 Q G G R E H G Q K A D Q L P G Y R S I G D P A A R A H V A Q V W G V D P E E L F  
UniRef90\_K6WLA2 Q G A T D F G L L F D N L P G Y Y G L T S G A W A H W S N V W D L D P A W  
UniRef90\_A1SBQ9 V S W K K E D H G H K Y D L N Y D H H E D E K V Y P Y N P P G T P T D L I  
UniRef90\_M1PCH9 N H G A I D I P R L V K K F S H R M N K A H S A L G N Y P I I F A G L P A S E F  
UniRef90\_K7RN92 C G T A R E V G T F A H R L P A D M V V T N P E H V H H A E E L W P G F H A V L  
UniRef90\_S9QDD6 C G T A R E V G T F S H R L P A D M V V T N P E H R R H A E E L W N I P H G I I  
UniRef90\_UPI00047B79B0 L D K S Q L E G S A L C D P S I R S L D Q A Q I G R  
UniRef90\_I5BRJ0 C G T A R Q V G T F R H R L P S D M T V T N P E R R Q D A E E I W R I P H G V I  
UniRef90\_Q56350 Q G A H W S N V W G V K H D W M K S R F K D E K I M G K K G F T V A R W Y E G V  
UniRef90\_UPI00037607D5 M G T R V C W P G H R D F G D P A H R A E V A D E W G V S V E T L P D D D P G P G  
UniRef90\_W0JTA8 M G T R V C S K G T W P G Q R G F T D P E E R Q F L A D E W E I P R S R L P D  
UniRef90\_B9LNQ6 Q G L A D M G A L P G F Y P G Y Q S V G R A K F E R A W G V E L N P K A G L A L  
UniRef90\_E1QE75 Q G A C D M N V S P N N K Q V T D E K A R E H L E R L W D C K L D S K V G L H K  
UniRef90\_UPI00046801A3 S G A F Q L E R S Y L G G A H L L C G E H P G G Y F R P N P A R H V N M S Q  
UniRef90\_D7BG58 T A L I P I L I G H T D E R S S K I R R T P V H G M F P I A G L P P N I L  
UniRef90\_UPI0003B3AE7D C G T A R E V G T F A H R L P A D M V V T N E K H R D I C E K K W N I P S G T I  
UniRef90\_V6PC80 A D G D M A G F R N W N D A H V A E L A R H W N L D P L Q I P H M A P T H A  
UniRef90\_F4CUS7 T P D Y A P Y Q D K I A E E G Y H Q K K I D R R G T L E L P A L K G V I T N A V  
UniRef90\_UPI0002F001ED K R L R P L S A L Y P N I T K P M A D K A D W Q Q P G L L H R A  
UniRef90\_E5Y3B6 Q S C D M G A L P N V L T G Y R D A V R A A F E A A W G V P L P A T P G L T V  
UniRef90\_UPI0004652A99 T W P E N P L C Q P P R G G M E Y D P D L F Y G I A M P E V W D A V V S G K Y  
UniRef90\_R5FP01 K P P I D A A R F A K Y L P M Q Y G A W T D R S G T Y K S F R T E L P V A A L  
UniRef90\_K0EYK0 Q G A C D M G V L P N Q F P G Y Q D V E D A V V R  
UniRef90\_K8CVE0 C G T V R E V G T L A H G L P G G L V V I T N A E H R K E A E H L W N L P E G R I  
UniRef90\_A9FEA4

UniRef90\_UPI0003F63F17 M Q I F R Y A E Q G T V R M L W I S A T N P A V S L P E L P R V R S L A Q E R L D 410 420 430 440  
UniRef90\_G9XU05 T A I E N G G H P Y P V K M L W L Q T T N P I A N M S E A P R I Y E A M R K V L D  
UniRef90\_T0IWZ6 P D M F D K A V S G E L K A M Y L V M G E D P V L T D G D A N H V R K G L K R L D  
UniRef90\_UPI00037D72D4 T V T D A L L N D N S V R A M I L V N F N V A H S M P N K A K V I R R L K R L D  
UniRef90\_I0H3D9 A D E I E T P G D G Q V R A L L T V A G N P V L L S T P N S G R L G R A L G G L G  
UniRef90\_R4X184 P D K P G F H A V L Q N R W V M V N N N M Q A A A N M N E G L P G Y R N A S N  
UniRef90\_K9GZB5 V L I Q N R M L K D G K L N A Y W V Q C N N N M Q A A P N L N E E T Y P G Y R N P  
UniRef90\_A4EXJ0 D K L K D Q S L I Q P P I K A A M I Y N H N N P V A T H P D Q N L V K A L K Q E D L  
UniRef90\_UPI0003FCBA32 Y E M M E R M E E G E L K S L L T I G S N P V L S N P N A N L V H K A F S S V L  
UniRef90\_W7SVV2 F A E S V L T G R P Y K L E A V I T E G N P L I S S A N T N K V R A A F R E L D  
UniRef90\_R4LKN0 M Q I F G Y A E E G S I G L L W I S A T N P A V S M P E S A R I R R I G G D Q C  
UniRef90\_B8DL3 G R E L L D A R D P E L R M I M V T A G N P A C M A A D A G A V A R A F R K A E  
UniRef90\_I0LC12 Q L L D S L G T A D G P R A L L V F G S N P V V S A P R A A R I E G R L R D L D  
UniRef90\_W1JRT3  
UniRef90\_D7C0X4  
UniRef90\_Q65NC5 Y E M F E A M E E G R L R A V Y C V G E N P A Q S S E A D S E Q A I R R L K A L L D  
UniRef90\_Q07WV3 T A D L D T P L I G A D T K A I F I N S N A L I N Q H S D S A N K I L E D E T K C E  
UniRef90\_C8PHY5 T Q C A D A L I E G Q N I K A I W L M A T N P V V S L P E A D K F A M A L E Q D C P  
UniRef90\_U1PHV0 V R I V D A L A R D N I D I C W T V A T N P V I A G V P D S S H V E T A L E Q T F  
UniRef90\_X1FP41 I E M L I E A A Y R K E I K A L Y L I G E N P A L S D P D V G H V R E T L A K L E  
UniRef90\_E1SB11 L D L F R A I A E G E V K A V W I M G T N P A V S M P E G N R V A Q A L A A C P  
UniRef90\_H1FSA1 K R F K N E E W M G K G F T L S R W W A G V L D G K G N D K I H A N A G T N D  
UniRef90\_D0CVM2 P A Q H R K L K D G D L N V Y W V Q C N N N M Q A A P N M N E Y P G Y R N P D N  
UniRef90\_D4H8U3 R D A V L R E D P Y K V D A M V I Y K Q N F I E A V T N R K K T M Q M I D K M E  
UniRef90\_UPI00037A3882 P G G R A G D I P D I R G I F W I Q G S D W F N Q L T N I N K E I E A M K L E  
UniRef90\_Q1Z843 T E I G H K V D E G I C K A F Y V F G E D P A Q T E A D L S A L R K T M G K M E  
UniRef90\_U5WTE2 M Q M F R Y A E E G T L R M L W V T A T N P A V S L P E L S R I R D I A Q T R L  
UniRef90\_G8QFB2 P D W V G L H A V A Q S R A L K D G K V A F F W S T I N G E V Y P G W R N P A A  
UniRef90\_K8ZQZ9  
UniRef90\_B11F3  
UniRef90\_UPI000349134F L R E A S P T F E N K A K A W Y I I G A D P V T K A A D A D S V R K A L S E A P  
UniRef90\_D6SM83 T E M V D A A A E G N F R A L I Y I N S N S N P V A V A P I P E S A K V V A G F R R E D  
UniRef90\_R7PHB7 S A L T L G S R G E K P I R S E F Y V Y G G N P V A S V C Q Q K G I L E G L L R P D  
UniRef90\_D5V743 P D I L I N E M I E G K V R K A L Y V M G E D I A H I H P N Q S K V H K A L D N L E  
UniRef90\_I3CCR3 R F D S N S Y E K E K V K  
UniRef90\_M7CQ42 A D E M L T P G E G S I R A F V T V A G N P V L S N P N G R R I R D S K A L E G L D  
UniRef90\_L1KHF0 M Q M F R Y A E Q G S I R M L W I S G T N P A V S L P E L S R I R I R S L L S Q D R  
UniRef90\_F8D3F8 P V I G I V D A I G D D V E A V F A V A T N P V A G M P E L A T R V R E S H L L E D A  
UniRef90\_D8F4G9 T E A L I K E K P Y I R K A F L I N A G G N P A V T F P A N T K R F M E A M K N I E  
UniRef90\_G8TT95 T Q M F D A M A A G R L R G L Y V I G E N P L I E S E A N S D H V R H L F E D L D  
UniRef90\_F7UYF7 V K I F R E M S K G N I D F L W T A H N N W A Q S M P N L T R F D Q K G I F D T  
UniRef90\_E6TJF1 A K E M T T P G H R Q I K A M F V S A G N P V L S V P N G D E L E S A L D S V L D  
UniRef90\_W7IWJ3 A E E I E T P G D K Q I K A F V V N A G N P V L S T P D G P R L A R A L A S G L D  
UniRef90\_UPI00035FOCC4 M Q I M R L A E T G T I R M L W I S A T N P A V S L P E L A R V R R I L D R H N  
UniRef90\_UPI00036DF337 A Y E L L D A L G R D V I R S L L L M G S N P V V S A P R A A H V E E R L R S L D  
UniRef90\_B8K6S8 I E M F E A V D R G E I N V I W I M A T N P V V S M P D N T F V K R A L E K C P  
UniRef90\_T0D452 Q A Q E I L S S N P P I Q V L F V T R T N P L T Q V P D S A T L R K A Y A G I G  
UniRef90\_F6AJN3 Q E K P G F H A V E K V Y W T Q V S N N M Q A G P N I M Q E V L P G W R L P D N  
UniRef90\_B9M850 G N A L N G L N D P P V M S L V V Y H S N P A A V T P D Q N A V I K G L R E D  
UniRef90\_UPI0003600670 A L V V Y N C N P A V V A P D S A R V R A G L Q R P D  
UniRef90\_A0EJ3 V G K P G Y H A V L Q N R W V M C N N N M Q A A A N L N E E T Y P G Y R N P A N  
UniRef90\_D3FYD3 F E M F E K M N E G E I K G L F L M C S N P I V S N P S S A F V K Q A I E K L D  
UniRef90\_F4L8R9 R Y A S P A M M T K P  
UniRef90\_J7LFF3 E L L D A L G A P D G P R A L L L F G S N P V V S A P D S A R V R A R L D S L D  
UniRef90\_B8FV01 P R E D Q I Q Y I H M I W S D T P C W T C W S G D N N M I K A L R S P K I E  
UniRef90\_UPI00041496CE P D Q S R A L K D G K L K C Y W T S T T N N M Q A G P N V N E E I Y P G W R N P  
UniRef90\_I3REZ1 M E L T E A I E S G A V K F L Y I Y N T N P L A S Y P N Q N R R R A I E K N N V  
UniRef90\_K9WCM8 F A E S I L T G K P Y R L K A I A T A G N P L V S S A N T R Q V K E A Y R Q L E  
UniRef90\_UPI0002D77CF6 P A Q D R M L N D G K I N A Y W V Q C N N N M Q A G P N I N R L P G Y R N P E N  
UniRef90\_X8BQS8 E M F T A L G R P G G I R A L M V C G S N I A V S A P D A S R V I E G L R S L D  
UniRef90\_UPI000405B275 Q A D E I L S A N P P I E L M F V T R T N P V I T Q V P D T A R L L E A Y K R I P  
UniRef90\_F7UVZ3 I A A L K A A L D G S I K G L F F Y N S N A A K G Y A Q P K K W T E A F E K A E  
UniRef90\_Q3AA07 M A N S I L A A E P P I K L I F V T R S N P L N Q A P D T K R M K E A F Y N V P  
UniRef90\_I4A6Q1 K W K G E M R D I D I R A I Y H D T S A R L Q T A D G M T K G I E A H R K V E  
UniRef90\_W0EC37 F A E S I E K A D P P L Q M A V V T R S N P L L Q Q P N S L L W K E V W S K I P  
UniRef90\_M4UPG1 T N M N H L V H D G K M K A Y Y I F G E D P A Q T E A D L A A F R E M M G K L D  
UniRef90\_U6E9R8 G D A L L S T H Q P I K L I F L S S G N P V T L N P N S L K V K G F E S A D  
UniRef90\_Q8U7P1 V Q Q D R M L H D G K L N F Y W V Q V N N N V Q A G P N T K N E T Y Y R N P E N  
UniRef90\_K6WLA2 K K V G R P A A E G G I R A L F V H G A N P V V S A P D A G A L E A R L R L D  
UniRef90\_A1SBQ9  
UniRef90\_M1PCH9 R D C A I S G K P Y P I K S C V V W G Q N P M Q T I P N Q Q M M K D L F N A M D  
UniRef90\_K7RN92 A E N V L S E R E D R L R A L V V V A G N P V T S F P N T K K M E Q A L K K L E  
UniRef90\_S9QDD6 Q D R M L K D G V L N F Y W V Q V N N N L Q A A P N S Q N E T Y Q G Y R N P D N  
UniRef90\_UPI00047B79B0 D P V P G Y H A V E Q N R W V M V N N N M Q A G A N M L E E T Y P G Y R N P D N  
UniRef90\_I5BRJ0 N D A E A L H G G P V T A L L I Q N T N P A N I A P E Q R L V K K G F L R E D  
UniRef90\_Q56350 P E Q P G H D G T L N F Y W I Q V N N N L Q A S P N N D G E A V P G Y R N P D N  
UniRef90\_UPI00037607D5 L M D K K E L G Q D V N V H A A F Y W G H S C N S Q S Q M D R V K K A L D K V D  
UniRef90\_W0JTA8 P V I G L E A V I E D E V E A V Y A V A T N P A V G M P D T T R V R R R L E D T  
UniRef90\_B9LNQ6 D P G P G P V G I V D A V A C W T V A T N P V A G M P D A S E V R S A L D D A  
UniRef90\_E1QE75 P A M F E A M A R G A V K A M W I C G E D V L A A P D G Q H A A R C L G A L D  
UniRef90\_UPI00046801A3 T E V P D E I L S G K I K V I Y T V I G E N P V I S E P N T N H F L K G L A H V G  
UniRef90\_D7BG58 L G S A L T R L D P V R A L F V F N S N P L V V A P S T A L V Q Q G A R E D L  
UniRef90\_UPI0003B3AE7D P D E T L K G E R R I R A A F A D S C N P V L T W P D T P A L T A A L Q S L D  
UniRef90\_V6PC80 P A K I G L H A K L N V Y W T M C T N N M Q A G P N I N E E R M P G W R D P R N  
UniRef90\_F4CUS7 M Q M F R Y I V E Q G T I R M L W V S A T N P A V S M P D L A R I R I L G Q E R  
UniRef90\_UPI0002F001ED A D S L L E E D P Y D L K V I T G Y W N N W V F S C T G A Q R W E K A L E K L P  
UniRef90\_E5Y3B6 F D A A V T G D P Y P V R A Y I S M R H N L S L S L P D T L R S K L D K L D  
UniRef90\_UPI0004652A99 P R M L E A I E A D R L R A L F V F G E N P M R S D P D I A H V E H C L R H V P  
UniRef90\_R5FP01 H D F V H G I Q P I D I R M W K I G D G G R M N Q N P K F M Q A V K A F Q S V E  
UniRef90\_K0EYK0 A E E I L T E G R G R I R A M I T Y A G N P V L S T P Q R G R L G A A L E S L D  
UniRef90\_K8CVE0  
UniRef90\_A9FEA4 N P K P G Y H T V D D I D T I W V M V T N P G Q S L P N T N E L F D R K I P G K

UniRef90\_UPI0003F63F17 F V V A Q D M F A N E T T E L A D V V L P A A G W G E K T G T F T N A D R  
UniRef90\_G9XU05 F N V V V D L F M T P T A V C A D I V V L P A G M S A E R D S F R A W F A D Y E R  
UniRef90\_T0IWZ6 F L V V Q N L F L T E T A K L A D V V L P G A S F A E K D G T F T N T E R  
UniRef90\_UPI00037D72D4 L L V V L D A Y M T E T A E L A H Y V V L P V A M W A E S E G S V T S L D R  
UniRef90\_I0H3D9 F M V S V D P Y L N E T T R H A D V V L P P L D A M R K G H Y D F A G F A V R N  
UniRef90\_R4X184 F V V V S D V Y P T V T A V A A D M I L P S A M W V E K E G A Y G N A E R  
UniRef90\_K9GZB5 E N F I V D P Y P T V T A L S A D L L L P T A M W A E K E G A Y G N A E R  
UniRef90\_A4EXJ0 F L V G C D V A M T D S M A L C D I L L P A S S H F E H A D I Y G A Y G Q N  
UniRef90\_UPI0003FCBA32 F M V A A E M F M T E S A S Y A D V I L P T S S Y L E D E G T L T N V E G R  
UniRef90\_W7SVV2 F Y V Y T G L F M E E A A Y A D V I L P V C S G L E L D G V Y M R R D G R  
UniRef90\_R4LKN0 F V V V Q D L F L T E T A Q L A D V V L P A A G W G E K T G T F T N V N R  
UniRef90\_B8DLD3 F V V Y S G H F M D D T A D L A H V F L P A T T F L E E D D V M A S Y G H N  
UniRef90\_I0LC12 L L V V A D L L L S E T A A L A D V V L P T A Q W A E E D G T M T N L E G  
UniRef90\_W1JRT3  
UniRef90\_D7C0X4 H L V V Q D I F L L T K T A E L A D V V L P A T A A W C E T D G T T T N S E R  
UniRef90\_Q65NC5 F F A A V D L F L S E T A E L A D V V L P A S S Y L E D E G T M T N L E G  
UniRef90\_Q07WV3 L I V V C D C W M T S S A K F A D I L L P D T S W L E S N D L D S Y A S G L M G  
UniRef90\_C8PYN5 L V I V S D C K D S D T L D F A H V V L P A Q G W S E K S G T V T N S E R  
UniRef90\_U1PHV0 L I V Q D A F R M S D T L E Y A D V V L P A A T W G E S V G T T M N M E R  
UniRef90\_X1FP41 F L V V Q D I F L S E T A K F A H V V L P A V S F A E K D G T F T N T E R  
UniRef90\_E1SB11 L V I V S D V M Q T D T S T F A D L L L P A Q G W G E K N G T V T N S E R  
UniRef90\_H1FSA1 M I V L C D P F V N E A A L T D K D V F L P A A T Q F E T S G S V T A T N R  
UniRef90\_D0CVM2 F I V V S D P Y P T V T A V S A D L I L P T A M W V E K E G A Y G N A E R  
UniRef90\_D4H8U3 F I C A I D I Q M T E A A Y A D L V L P E S T Y L E R W D V V H S L S G L W P  
UniRef90\_UPI00037A3882 L V V C N D A I T P S G L Y A D V L F P V A T H F E R H D V A L P W Y K G H Y  
UniRef90\_Q1Z843 L V I V Q D I F M T Q T A E M A D V I F P A T S W G E H E G V Y S S A D R  
UniRef90\_U5WTE2 F L V V E D I F M T E T A E L A D V V L P A A A W G E K T G T F T N A D R  
UniRef90\_G8QFB2 F V V H S D V Y P T V S A L A S D L I L P S A M W M E K E G A Y G N A E R  
UniRef90\_K8ZQZ9  
UniRef90\_B11F3 F V V V Q D T F L T E T A K L A Q V V L P T A G F A E K E G T F T A V D R  
UniRef90\_UPI000349134F F T V V L E H F L T D T A D H A D Y V L P A T T Q L E H W D V H A S Y G H T  
UniRef90\_D6SM83 F L V V Q D I F M T E T A R M A D V I L P A A C F A E K E G T F T N S E R  
UniRef90\_R7PHB7 F T V V H E R F M T D T A M Y A D I L L P A T F S V E Q T D V Y T A Y G Y C  
UniRef90\_D5V743 V I I S N E L F M N E V S K Y A D I V F G V K S A Y E K T G V Y V N A M  
UniRef90\_I3CCR3  
UniRef90\_M7CQ42 F M V S V D D Y Y L N E T T R H A D V I L P P T A A L E R S H Y D F N M F A V R N  
UniRef90\_L1KHF0 F V V V Q D L F L T E T A Q L A D V V L P A A T W G E K T G T F T N A D R  
UniRef90\_F8D3F8 F L V V Q D A F R S E T A E L A D V V L P A A T W G E S A G T T F T N M E R  
UniRef90\_D8F4G9 L N V C I D P F M T E T A G E L A D V V L P A C T F L E E T G V G Y C L S H C T P  
UniRef90\_G8TT95 A L V V Q D I F L T A T G E L A D V V L P A R A S F A E S T G T Y T N S E R  
UniRef90\_F7UYF7 F I V V N E V Y P T L S T K Y A D V V F P V A M W V E R E G Q F G N A E R  
UniRef90\_E6TJF1 L T V G L D F Y L N E T M A H C D V I L P V T T M Y E R D D H V F Q Q F Q A T P  
UniRef90\_W7IWI3 F M V A I D V K V N E T T R H A D V I L P P T P L L E R D F Y D I F N A F R D  
UniRef90\_UPI00035FOCC4 F L V V Q D I Y R T E T T A F A D V V L P A A A W G E K T G T F T N A D R  
UniRef90\_UPI00036DF337 F L A V A D V L T S E T A E L A D V V L P V T Q W A E E T G T T N L E G  
UniRef90\_B8K6S8 M V I V S D V T N S D I A K Y A T L L L P A A G W G E K Q G M V T N S E R  
UniRef90\_T0D452 C K V V I D M Y M T E T A Q A A D Y V L P C T S V L E E E D V T Y T M W H P  
UniRef90\_F6AJN3 F V I V S D V Y P T V S A Q A A D L I L P S A M W V E K E G A Y G N A E R  
UniRef90\_B9M850 F T V I H E R F M T D T A R H A D V L L P A T S S L E H S D L Y R S Y G T Y  
UniRef90\_UPI0003600670 M V V V L E Q A M T E T A R N A D V V L P A T T F M E H A D I Y T S Y G H H  
UniRef90\_A0EJ3 F I V V S D P Y P T V T A Q A A D L I L P T A M W V E K E G A Y G N A E R  
UniRef90\_D3FYD3 F F V A V D M F L S E T A S L A D L I L P A T S Y L E T S G T M T N V E G  
UniRef90\_F4L8R9  
UniRef90\_J7LFF3 L L V V A D F V L S E T A A M A D V V L P V A Q W A E E R G T M T N L E G  
UniRef90\_B8FV01 F V V I C H P W L E N D C L F A D I L L P I N T K L E E Q D I S V D V F S G E F  
UniRef90\_UPI00041496CE F V V V S D A Y P T V S A L A F A D I L L P S A M W T E K E G A Y G N A E R  
UniRef90\_I3REZ1 F V V T H D I F L T D T A L Y S D I V L P A N T F F E R L D I V D S Y Y H R  
UniRef90\_K9WCM8 F Y V Y T G L F M E E S A Y A D I L L P V C S G F E M E T V Y M R R D R  
UniRef90\_UPI0002D77CF6 F I V V S D P Y P T A T A Q A A D L I L P T A M W V E K E G A Y G N A E R  
UniRef90\_X8BQS8 L L V V N D F V L S E T A Q L A D V V L P V L Q W A E E E G T T M S L E G  
UniRef90\_UPI000405B275 C I V V V D M F M T K T A E L A D Y F L P C T S V L E E E D F V Y S T M W H N  
UniRef90\_F7UVZ3 L S V C I D V Q M S E T A L Q S D Y V L P E V T Y L E R L E L P E F I G G K K H  
UniRef90\_Q3AA07 F K V T V D F F L T D T A Y A S D I V L P A T S V F E E E D I V F S S W H Y  
UniRef90\_I4A6Q1 L V V S H A Q F L T T N A K Y A D L I L P L T T E W E K L G G F V T G N R E  
UniRef90\_W0EC37 F K V T L E L V M S E T A R Q S D L V L P V T T I F E E E D L I V S S W N P  
UniRef90\_M4UPG1 L V I V Q D I F M T Q T A M A D V I F P A T S W G E H E G V Y S C A D R  
UniRef90\_U6E9R8 F V I M I D H F L N D T S D V A H L F L P G T T Y L E E E D L M G S Y G H N  
UniRef90\_Q8U7P1 F I V V S D A Y P T I T A M S A D L I L P A A M W V E K E G A Y G N A E R  
UniRef90\_K6WLA2 L L V V A D L V P S E T A Q L A D V V L P I T Q W A E E S G T M T S L E G  
UniRef90\_A1SBQ9  
UniRef90\_M1PCH9 F V M C V D V M P T D V T A W A D I L L P E A S Y L E R Y D Y I K T G T Q W D L  
UniRef90\_K7RN92 L L V C I D I Y R S D T G A F A H Y N L P A A T E Y E K G G I H F M T S N F E A  
UniRef90\_S9QDD6 M I V V S D A Y P T V T A M A D I L L P A A M W V E K E G A Y G N A E R  
UniRef90\_UPI00047B79B0 F I V V S D A Y P T V T A Q A A D L I L P A A M W V E K E G A Y G N A E R  
UniRef90\_I5BRJ0 F T C H E Q F M T D T A K L A D V V L P A T M F L E H D D I Y R G G G H Q  
UniRef90\_Q56350 F I V V S D A Y P T V T A L A D V I L P A A M W V E K E G A Y G N A E R  
UniRef90\_UPI00037607D5 L L V D I D P F V T T S I L P D R K V Y I L P A A T V Y E Q A G S V T N S N R  
UniRef90\_W0JTA8 F L V V Q D A F H S E T V E E A D V V L P A T T W G E S E G T A M N M E R  
UniRef90\_B9LNQ6 F L V A Q D A F R T E T V E L A D V V L P A A T W G E S E G T V T N M E R  
UniRef90\_E1QE75 F L V C G D I L L P A T T S L A D V V F P L A A W G E S D G V F T N S E R  
UniRef90\_UPI00046801A3 L Y I V Q D I L Y L T E T A V K A D V L L P A V C G P E K Q G L Y A N A E R  
UniRef90\_D7BG58 F T V V L E Q A L T E T A R Y A D Y L L P A T T F L E H P D L Y T A Y G H F  
UniRef90\_UPI0003B3AE7D L L V V V D V A M T E T A R L A H Y I L P A A S Q F E K C E T G F N L E F P E N  
UniRef90\_V6PC80 F I I V S D P Y P T V S A L A A D L I L P T A M W V E K E G A Y G N A E R  
UniRef90\_UPI0003F4CUS7 F L V V Q D I F P S E T A R L A D V V L P A A T W A E K T G C F T N A D R  
UniRef90\_UPI0002F001ED F F A H I T T N P A E M T Q Y A D I V L P A A F H F E R W G V L D S K Y N M H S  
UniRef90\_E5Y3B6 L T V A I T T T W S P T A D Y A D I V L P L S P A L S R E S I L A S K L G L K P  
UniRef90\_UPI0004652A99 F L V V Q D I F L T E T A R Y A D V L L P G A S F A E K D G T F A S T E R  
UniRef90\_R5FP01 F V V A S D L W M T N D A Q Y A D I V L P A S S F W E R D A Q V L T Q I N R E T  
UniRef90\_K0EYK0 F Y V A V D M Y V T E T T R H A D I L L P I I S P L E R E D V N I L L F F S V R N  
UniRef90\_K8CVE0  
UniRef90\_A9FEA4 F L I V S D V Y P T A T V R A A D L V L L P S A M W V E K N G M F G N S E R

UniRef90\_UPI0003F63F17 T V H L S E K A I P D P P G E A R A D L D I L F L D Y S R R M D F R D R D G N S L P  
UniRef90\_G9XU05 C K S D E Q I V L E L G K R L H P E A F P W E T V Q D W I N W K M G N D K E K Y  
UniRef90\_T0IWZ6 R I Q R V R Q A I N P P G E A R S D L W Q I L E F S K R F F Q Q V D K F P S S Q E  
UniRef90\_UPI00037D72D4 L V K W R F K A V D P P G E A R Q T L F V L A D L G E R L G L R T S R N H A S E  
UniRef90\_I0H3D9 F A A Y S P P V L P P D P D G L D E C D I L L A R L L R I T G Q G D G D P A V V H  
UniRef90\_R4X184 R T Q F W H Q L V E A P P G Q A R S D L W Q I V E F S K R F F Q Q V D K F P S S Q E  
UniRef90\_K9GZB5 R T Q F W R Q Q V S P P N G A K S D L W Q L V E F S K R F T T D E V D P Y P L T  
UniRef90\_A4EXJ0 Y L Q R A E P V L P P V G E S L P N T E I F R R L A A R F G Y E G E I F T A S D  
UniRef90\_UPI0003FCBA32 R V T L R E A S R P L P G E C R H D W Q I M A A I A E V M G R G T L F S Y E K A  
UniRef90\_W7SVV2 A I R W Q Q V V P R V G E S R P D W E I W I D L A A A L A R N D K H N P P S Y  
UniRef90\_R4LKN0 T V H L S E K A V D P P G E A K S D L D I L F L M Y A A A M D F R D L D G E P L I  
UniRef90\_B8DLD3 Y V G P V N R A I E P V D E C R S E F M M F H D L A A R F P F A D R F R R G V D  
UniRef90\_I0LC12 R V L R R R A L R P P P G V R T D L A L L A D L A A R L A P D Q E A A F P V D  
UniRef90\_W1JRT3  
UniRef90\_D7C0X4 R V I Q R V R K A A V N P P G E A R E D L D I L I C E L A R K L G R D W K F T D A E E  
UniRef90\_Q65NC5 R V T L R E A S K P C P G E A R H D W Q I L I C E D I A K A L G K G R Y F S Y R S A  
UniRef90\_Q07WV3 Y L V A M K A A I K P L W E C K S M Y D M C A L I A E K M G K L G E Y T E G K D  
UniRef90\_C8PYN5 R I S R Q R R L V T P F A D A K R P D W W I V S Q V A Q K M G F V E D Y T H D Y Q  
UniRef90\_U1PHV0 R V S R V T A S A D P R V G E S R P D L D I I A A I G N R I H S G L F N S P P S  
UniRef90\_X1FP41 R V Q R V R K A I E P I G D S H P D W W I I C Q I A K R L G G G F D Y S H P F D  
UniRef90\_E1SB11 R I S R Q R A F A A P G D T R P D W W L L A Q V A Q R L G F W Q H P S E I F C  
UniRef90\_H1FSA1 S V Q W R S K V V E P M Y E S K T H D I M F E L A K R L G F Y D E Y T E N K K  
UniRef90\_D0CVM2 R T Q F W R Q Q V K A P G E A R S D L W Q L M E F S K R F  
UniRef90\_D4H8U3 I A T F R Q A V V E P V I G K T K M F D I A Q G V V N E M V K L P E L W D N A D  
UniRef90\_UPI00037A3882 Y I H R P K V I E P M G E S K T D W E I Y T E L A W R L G G E Q F G K R Y N P  
UniRef90\_Q1Z843 G F Q R F Y K A V T P P P N V K P D W E I F S L L A T R M G Y P M S Y S N T E E  
UniRef90\_U5WTE2 T V H L S E K A I E P P G F A R S D L D I L F L D Y A R R M D F R D K D G R P L M  
UniRef90\_G8QFB2 R T Q F W R Q Q V K P Q G Q A R S D V L Q Y V E F S K R F K M E E V W P K G K T  
UniRef90\_K8ZQZ9  
UniRef90\_B11F3 L V Q R V R Q V A E P P G A A K P D W W I L C E I A H R M A E G F A Y N H P S Q  
UniRef90\_UPI000349134F Y L L I N E P A L P P G A Q A R S N A E I F R Q L A A R M G F D E P C F Q D D D  
UniRef90\_D6SM83 R V I Q R V R K A V E P P G E A R E D S W I A S L S S M G Y D I S Y D R I E D  
UniRef90\_R7PHB7 T F G T A R K I V E P A G Q S K S N W N T F R L L A R A M G Y G E E Y F K R T E  
UniRef90\_D5V743 R R L H L S Q P L V E S D L P D D W E V L R D I E N K I N G E F I Y E T S  
UniRef90\_I3CCR3  
UniRef90\_M7CQ42 V A K F S D A L F E K P A D D T R H D W Q I L I E L T H R  
UniRef90\_L1KHF0 T V H L S D K A V E P P G E A E P D L D I F L D Y A A R M D F R D K D G G P L I  
UniRef90\_F8D3F8 T V S R V R A A T E T P S G I K T D L E L I G A I G D R V V P E L F D T P L E  
UniRef90\_D8F4G9 Y V M L R K K C I P L H E S K A V W W I Y N E L G R K L G Y E E Y F P W K T D  
UniRef90\_G8TT95 R V I Q R V N A A R Q A P G E A Q D D I W I T Q L A R A M G Y D W P L K D A E A  
UniRef90\_F7UYF7 R T S V F E K A V D P P G E A K W D L W I I M E V A R R  
UniRef90\_E6TJF1 F R Q V T E A V I A P V I G Q A R Q E W E I I G E L T G R M A D H S R V F A G M T  
UniRef90\_W7IWIJ3 T A R F A P A V L P K P E E A R H D W E I F R E L G L R Y R K R F  
UniRef90\_UPI00035F0CC4 T V H L S Q Q A V R P P G Q A R S D L R I F L D F A R R M N L R D R D G N P L P  
UniRef90\_UPI00036DF337 R V L T R R R A L T P P P G V R S D L E V I H G L A G L G H E K G F P T D P E  
UniRef90\_B8K6S8 M L T R Q R Q F T P P K G Q S K P D W L A I C E V G E K L C N L Q C K P N A F  
UniRef90\_T0D452 Y L S Y I H P V V P P R G E S K P E W Q I F S E L A D V L G M G E K  
UniRef90\_F6AJN3 R T Q F W H Q L V G A P G E A K S D L W Q L V E F S K R F T T  
UniRef90\_B9M850 H I Q R A R A V I P A V I G S K S N R E V F G L L A Q A M G L D D P F F R Q T A  
UniRef90\_UPI0003600670 W L S Y N P A T L E A P G E A R P N T W V F G E L A R R L G V T D P A V Y W T V  
UniRef90\_A0EJ3 R T Q F W R Q Q V N A P G E S R S D L W Q L V E F S K R F K V E E V W P E  
UniRef90\_D3FYD3 R V T L R R E A S F P L K A N A K H D W Q I I C E V A Q A L G Y G D Y F S Y H T S  
UniRef90\_F4L8R9  
UniRef90\_J7LFF3 R L L R R E R A T A P P D G V R T D L E V L S S L A A R L G Q P A D R F P T D  
UniRef90\_B8FV01 N H I F H E Q C I E P L Y E S K S D Y E A V C E V A K K L G L Y E E Y T K G S  
UniRef90\_UPI00041496CE R T Q F W R Q Q V K A P G E A R S D L W Q Y L E F S K R F G L Y E E Y T K G S  
UniRef90\_I3REZ1 Y L L L N E P V I T Q G P G K S N S E V T R L I A K A L G I R N K Y L H E S D  
UniRef90\_K9WCM8 A I R W Q K Q A V P R V G E S K P D W E I W I D L A H A M A P N A Y W T E N F P  
UniRef90\_UPI0002D77CF6 R T Q A W Y Q Q V G T V G E A K S D S W Q V M E F T K R F K M E E I W P E P I E  
UniRef90\_X8BQS8 R V L T R R R S V P A P P G R S D L H I L Q D L A V R L G Q P A D R F P T S A  
UniRef90\_UPI000405B275 Y V T Y L H R V C E P P G E A R P D W E I F A A L A D E L G F G D K M R R P V E  
UniRef90\_F7UVZ3 Y V G M R T V V L D R H P E T K T C D E I F N G L A E A C G V G E Y F Q F T A E  
UniRef90\_Q3AA07 Y L S Y L P K I V T P P N G M L T E V E F W N E L A R K I G L K N F  
UniRef90\_I4A6Q1 L L I M Y S Q I T E K M Y E C E S D Q W I A K E L G R K I G V D V S K A F P F D  
UniRef90\_W0EC37 M L Q V T E K V V E P Q G E T K S E L E I F S E L A K R L G I G K F S L T S S  
UniRef90\_M4UPG1 G F Q R F N K A I N P P A G T K I D W E I F S L M A T A M G Y P M S Y E N T N E  
UniRef90\_U6ER98 W V S P V N Q V V P P G E A K S E F E I F Q L L A E R L D F K E E M S G D  
UniRef90\_Q8U7P1 R T H V W H Q L V E A S G E A R S D L W Q L V E F S K R F T T  
UniRef90\_K6WLA2 R I L A R H K A I E P P P G V R D E L W V W R E L A A R L A A P A P F S D D  
UniRef90\_A1SBQ9  
UniRef90\_M1PCH9 S K E H Q Q Y I S A R M P L V I P P M F E R K D  
UniRef90\_K7RN92 K P Y W R P K L V K P R G Q A K P E W D I Y K A L S R S A G V P F L N D P L A D  
UniRef90\_S9QDD6 R T H A W H Q L V D A P G E A R S D L W Q M A E F S R S F T T D  
UniRef90\_UPI00047B79B0 R T Q F W H Q L V K A P G E A R S D L W Q L M E F A K R F T T D E C W P F Q N D  
UniRef90\_I5BRJ0 H I L I G P K L V D A P G E A R E N L F V I L E E L A E R L G V A D K G G F G L T  
UniRef90\_Q56350 R T H V W H Q L V E A P G E A R S D L W Q M M E F A S T R F T T  
UniRef90\_UPI00037607D5 D I Q W R N Q V V K P V W E S R K D L D I T I D L A D R L G F G K E F K K N R A  
UniRef90\_W0JTA8 T V S R V R A A T D T P S G V K T D L E L I A E L A T R P G L F E R S P E P A S  
UniRef90\_B9LNQ6 R I S R V R A A T E T S P K I K Q D L D I I V A I G A A I D G E L F R P P A L S  
UniRef90\_E1QE75 R V S R A R K A V N P P G Q A K P G W W I F R E V A R R M G H D W P S Q S S R E  
UniRef90\_UPI00046801A3 R V Q M N Y K A V E P V I G D V K E D W Q I T C E I A K R L G K G F D Y T C T E D  
UniRef90\_D7BG58 Y L S W N E P V M F P P G E A R P D W I V F A E L A R L G L E E P T L Y W S A  
UniRef90\_UPI0003B3AE7D F F H L R H P L L P A L G E S L P E P E L Y T R L L E K M G E L P R D F  
UniRef90\_V6PC80 R T Q F W R Q Q V Q A P G E A K S D L W Q L V Q F S R R F  
UniRef90\_F4CUS7 T V H L S D K A V D P P G D A R A D L D I L L D F A R R M D F R D A D G R P F P  
UniRef90\_UPI0002F001ED Y L T I Q Q P V V K P L W D V K I D E T E I V W L S E K L A E K G F P N L L N  
UniRef90\_E5Y3B6 Q F F R R Q R A V Q P R F D T R A D W E I L C G L A S R L G L D K L A F S R L  
UniRef90\_UPI0004652A99 R V I Q R I R R A V A P V I G D S R P D W E I L A E L A R L G R P E R Y A S P Q A  
UniRef90\_R5FP01 L I F A Q K V C D P G E A K E D L W I E A E L A K R W G I D P S L V I Q P S T  
UniRef90\_K0EYK0 N L R Y D A R V F E P A E G L E D W Q I L A R M  
UniRef90\_K8CVE0  
UniRef90\_A9FEA4 R T Q Q W F K M V E P P G E A R D D A W Q I I A V A R K L H D M V W D Y K H Y H

UniRef90\_UPI0003F63F17 Q W G D A E S A F 530 D A W R R C G R P C 540 D Y S G L S Y E M L R E R S G V Q W P C N  
UniRef90\_G9XU05 P E A L V R K W T P E G K K Y R E R G N T Q G M T Y T E L K E K V Y V Y P E W A  
UniRef90\_T0IWZ6 I F M D E I A S L T P S L A G V S Y D R L E E K G L Q W P V P  
UniRef90\_UPI00037D72D4 V F E E M K E V V P L Y S K L S L A D V M D H S K N S R Y P N G E L V L  
UniRef90\_I0H3D9 E Y L L D Q A L T R T G V A A A R E L I A G D G P A E R L A R P G G L T L Q N L  
UniRef90\_R4X184 D F Y L Q K G L F E E Y A S F G R G H G H D L A P F D N Y H Q A R G L R W P V V  
UniRef90\_K9GZB5 E L A D D Q G L F E E Y A F G R G K A H D L A P F E M Y H Q S R G L R W P V V  
UniRef90\_A4EXJ0 R D L M D Q A I D P N H P Q L E G R R P S E I P L D Q A I E M R A T  
UniRef90\_UPI0003FCBA32 E D I F N E L R L A S R G G K A D Y Y G M T Y D R I R R E S G V F W P C  
UniRef90\_W7SVV2 W T D A F P Q S W K D Y S N L W A E P G V G G M T K Q R L A S R E P L R W P C  
UniRef90\_R4LKN0 R W R T P E E A F D A W R E T T R G R P V D Y T G L T Y A K L R G P T G I P W P  
UniRef90\_B8DLD3 E W L H D L C A P V W A Q G C T P E R  
UniRef90\_I0LC12 P A T V F A E L R R A S A G G V A D Y A G L D W A R I D D A D G V F W P C  
UniRef90\_W1JRT3 V W N E L R S L S P D H F G M T Y E R L E E H H G I Q W P C  
UniRef90\_D7C0X4 E D V F N E L R K A S R G G I A D Y S G T Y E R L R K E G G I L W P C  
UniRef90\_Q6NSC5 E A G W L T E L Y E K T R T N S N N A N A I P P L P S T Y E E A Q A Q G V F R  
UniRef90\_Q07WV3 V F A E H A R L K N T D S R S F N I S H L A N I S Q N E Y D N L A P F Q W G Q P  
UniRef90\_C8PHY5 P E T I F D E I R E L T A G T N A D M F G I S Y D R L E A E R A V R W P A P  
UniRef90\_U1PHV0 I M E E I R Y L T P S Y G G I S Y Q R L E N G G L Q W P C  
UniRef90\_X1FP41 E H A A L S G F E N D G Q R A F D L S G L A Q L S Q A E W D A L R P V Q W P V N  
UniRef90\_E1SB11 D F T W P E D A T D E I A R I I K T I G L T G W T A K R I K K H T E N W H M F D  
UniRef90\_H1FSA1 T V E E V W G E E L L A K M P E H R G K T L F D V L Y A N G K V D K  
UniRef90\_D0CVM2 E F E V D D F K D E I V D G I L N K P I Q D Y I K Y Q L S G H P G A Y E Q M L K  
UniRef90\_UPI00037A3882 K A N R D Y F L N P D E R E W W E N K V M A H Q H V E M P W D E F K K H G V Y K  
UniRef90\_Q1Z843 I W D E M R V L C P L Y T G A T Y E K M A G L K S V Q W P C  
UniRef90\_U5WTE2 W W T D P E S A F E A W K K C S A G R P C D Y T G L S Y D K L R G G I Q W P C  
UniRef90\_G8QFB2 L Y D V L Y A L F E E Y A A F G R G H G H D L A A F D T Y H K A R G L R W P V V  
UniRef90\_K8ZQZ9 I M E E I S S N Y P A Y A G I S Y D R L D P E G L R W P C  
UniRef90\_B11F3 L S L A R Q A F E V D F D E L R R V I G W L K L P V P  
UniRef90\_UPI000349134F V F Q E A G K A W P A L G G M D Y Q R L I E H R G L Q W P C  
UniRef90\_D6SM83 E E M V W E L L A H P M E G L T R I S E K E W R L L R E G G V I  
UniRef90\_R7PHB7 E N V W D E V R D A V S S R F S G A T Y H K L S K N R N R G M Q W P I G  
UniRef90\_D5V743  
UniRef90\_I3CCR3  
UniRef90\_M7CQ42  
UniRef90\_L1KHF0 T W H D P E S A F E A W K R C S A G R P C D Y T G L T Y D K L R G G I Q W P C D  
UniRef90\_F8D3F8 P A A V F D E L A A L T A G T P A D L S G I S Y D R L E E E A A V R W P Y Y  
UniRef90\_D8F4G9 E  
UniRef90\_G8TT95 V F D E M R Q L A P N F R G M T Y S A L K E H Q G I Q W P C P  
UniRef90\_F7UYF7  
UniRef90\_E6TJF1 A A G K V K P F T P R A F A D I V I R T S T G G D W F G L R R G G L S H W R L A  
UniRef90\_W7IWJ3  
UniRef90\_UPI00035FOCC4 P W D D A H S A F A A W Q R C S A G R P C D Y T G I D Y P Q R D G G I Q W P R P  
UniRef90\_UPI00036DF337 E V F G E L R R A S S G G P A D Y A G I S Y R R L E E E Q G V F W P C P  
UniRef90\_B8K6S8 G F E S E A D V F R E F A A M S G I N K Q S P L L F D I S E Y A Q I S D E  
UniRef90\_T0D452 M E G S V Q S W L T L A L R P L L A Q G I T L E Q I  
UniRef90\_F6AJN3 D E V W P A E L L A K A P Q L K G K T L F E V L Y R N G Q V D A  
UniRef90\_B9M850 D D L I D H L L S I P T S L R Q D I D V E A L  
UniRef90\_UPI0003600670 D D L L L N E V L S D T P H P H L A G I T P E R L K A E G M L H L  
UniRef90\_A0EJJ3  
UniRef90\_D3FYD3 E E I F E E L R K V S K G G L A D Y S G I T Y D R L R K E N G I L W P C T  
UniRef90\_F4L8R9  
UniRef90\_J7LFF3 P D T V L A E L G R A S G G A A D Y S G V T P E R L A D G Q A L Y W P V R  
UniRef90\_B8FV01 I E D W L K A G F E T S G V A H K I S Y E E F R E K D Y Y M I P T A E G W  
UniRef90\_UPI00041496CE E E V W P A E L I A R K P E Y K G K T L Y D V L Y A N K V V N K F S K A D L A  
UniRef90\_I3REZ1 E S V T R K V L K D N G I S W E E L K K K G F V K I P E K  
UniRef90\_K9WCM8 L E W K D Y R N L W A T F V K N T P G M G G M T Q E R M E K R A E P L R W P C P  
UniRef90\_UPI0002D77CF6 E A R E L K G L F E E Y A E F G R G H G H D L A P Y D V Y H N V R G L R W P V V  
UniRef90\_X8BQS8 P Q V F S E L R A A T A G A A A D Y S G I T Y Q R L D D G Q A I R W P C P  
UniRef90\_UPI000405B275 E W M S L A L H P L R E H G I T L Q E L K Q G G T I R V T P P  
UniRef90\_F7UVZ3 E W A E A Q L A T V I G V T L D Q M K Q E G V V E L P D P  
UniRef90\_Q3AA07 E P K T A R E F I T E A L E P L K P L G I T F E L R E K G Y V R H P  
UniRef90\_I4A6Q1 E K Q Q F N M I A G T I T A A D I A E W G Q I T L K E F K E Q G L Y Q V E R K  
UniRef90\_W0EC37 E W I E I T P H E Y G I T L E S L H Q G P V R A P Y I  
UniRef90\_M4UPG1 I W D E I R S L C P D F A G A T Y D K M D G L K N V Q W P C T  
UniRef90\_U6E9R8 P K M W L E K M A K P I L K Q G I T F E E L  
UniRef90\_Q8U7P1 D E V W P A E I L D A N P A Y R G K T L Y E V L Y K D S D V I G K  
UniRef90\_K6WLA2 P H E V L A E L A R A S A G G I A D Y G G V T M E R A T R E A L Y W P C P  
UniRef90\_A1SBQ9  
UniRef90\_M1PCH9 Q I Y I T N E I A K R M G H E A K I P V K T M E E M V D K N L A T V N L S I E K  
UniRef90\_K7RN92 K A S K I M E W F K I T F S S D F L Y R M V L P S K T S F S K L R N S D Y G I H  
UniRef90\_S9QDD6 E I W P V E I L D A H P E Y R G K T L F D V C Y A N G Q V D A Y P L E D  
UniRef90\_UPI00047B79B0 E S A F K G L F E E Y A A F G R G H G H D L A P F D A Y H Q A R G L R W P V V  
UniRef90\_I5BRJ0 A R E H V E F M L E K K A D R W A D V Q P D F D T A H F V D G F G H P D G K Y R  
UniRef90\_Q56350 D E V W P E E I L A A N P N Y R G S L F D V L F R N G S V D R  
UniRef90\_UPI00037607D5 W K Q L P E D I T R E W N L G M R T I G M T G Q T V I E R M K R Q Q D W G H A F D  
UniRef90\_W0JTA8 I F D E F A E L T A G T L A D C S G I S Y D R L E E E R A V R W P A P  
UniRef90\_B9LNQ6 P E S V F D E L R A L T A G T P A D L S G I S Y D R L E A E R A V R W P A P  
UniRef90\_E1QE75 I W D E L S V L A P A L A G V T Y D R L E G D G L Q W P C P G L A H P G S A Y L  
UniRef90\_UPI00046801A3 I W E E V R L A D P D R Y G G M S Y K R I T E H S G L N W P C P  
UniRef90\_D7BG58 E D L A R S L L S S G H P W L E G I T L E R L K  
UniRef90\_UPI0003B3AE7D  
UniRef90\_V6PC80  
UniRef90\_F4CUS7 A W H D A E S A F D A W A A S T A G R P C D Y T G L S H A T L R  
UniRef90\_UPI0002F001ED Y S S N E F K D P E T G K K P T T P E E F A L Y A T K Y Y S H P A W D P T V I E K  
UniRef90\_E5Y3B6 E D I W N Y Q L I E G T G L G I E A F D A  
UniRef90\_UPI0004652A99 V F D E M R R L T P S H A G I T Y A R L D A G G I Q W P C P  
UniRef90\_R5FP01 K Q M A F N E L L G A E V I L P D G S G W G R V P L R E F L E T G V Y Q V P R H  
UniRef90\_K0EYK0  
UniRef90\_K8CVE0  
UniRef90\_A9FEA4 D V N V D E Q L F E E Y R E F S R F K H K D L A P Y R E Y V K A R G L R W P V V

UniRef90\_UPI0003F63F17 E D A P E G T E R L Y A N G K F W 570 580 590 600  
UniRef90\_G9XU05 Y K K Y E K G L L R R D R Q P G F N T A D G K V Q L Y I D L F E A F D V D  
UniRef90\_T0IWZ6 D K N H P G T Q Y L H A N G K F T C G T I A N F K A I D H Q P P G E E  
UniRef90\_UPI00037D72D4 K E H P H G I D L G P L Q P R L P D A L R T P S G M V E L C A P P L A A  
UniRef90\_I0H3D9 N G K E T L R R Y K E G S D P Y W Q F Y G N T D G R A V I Y A L P Y E P P A E S  
UniRef90\_R4X184 D D Q E T L W R F R K G Y D P Y V N G Y G K P D G R A V I F A L P Y E P P A E V  
UniRef90\_K9GZB5 D G E S L V L C A N V M P D T A S G K I E L F S Q D L E D Q F G F  
UniRef90\_A4EXJ0 T V T H P G V S A L Y Q D H P S W K R F L T P S G K I E L F T E S A A E E K E E  
UniRef90\_UPI0003FCBA32 V N D D A P E G T D R L Y A D A V F P T A T D Y C E T Y G H D L  
UniRef90\_R4LKN0 L R A G A C R L D A P M A P Y A D R T F P T P S G K F R F M T D D P A G L G A V  
UniRef90\_B8DLD3 S E D G P D T P R L F A D R F G T P D G R A R F H A V D H R P A A E E  
UniRef90\_I0LC12  
UniRef90\_W1JRT3  
UniRef90\_D7C0X4 S E E P S Y L H G R L W A A D P A L R G P R A P F G  
UniRef90\_Q65NC5 E E G H P G T Q R L F E S S F S H P D K K A R M C V V P N E P K V K K  
UniRef90\_Q07WV3 A F D G K T V V A L E D Y L N G T D T L N T P S G K I E I F S L E L A Q K G T D  
UniRef90\_C8PYN5 H Y F  
UniRef90\_U1PHV0 S A D T E G S Y R Y H T N D D E W S F Q T A S G R A Q F S T A T H N Q V P E P  
UniRef90\_X1FP41 T D D H P G T P I L H V N T F V R G K G R F T P L K Y V P P G E S  
UniRef90\_E1SB11 A A H P Q Q G C A R L F G D R R F F H Q D G K A R L  
UniRef90\_H1FSA1 Q I S G R G Y G E M K G E Y Y  
UniRef90\_D0CVM2 Y P L S E T A E G F H N D E S E H F G F Y V Q K G L F E E Y A S F G R G K A H D  
UniRef90\_D4H8U3 E G V F Y L S D K P T Y T R K P G Y R F K T R T G K I E L L N V K Y V A E G L D  
UniRef90\_UPI00037A3882 F I L P R P H V A F Q D N V E K G T P W P T A S G K I E I F S G Q L A Q Y D D H  
UniRef90\_Q1Z843 T E D H P G T S F L F E G N K F T M P S G K G K L I A E W R P P H E Q  
UniRef90\_U5WTE2 A D Y P D G T E R L Y T D A G F W  
UniRef90\_G8QFB2 D N K E T L W R F R E G Y D P Y V K A Y G F P D G K A V V F A L P Y Q P A A E Q  
UniRef90\_K8ZQZ9  
UniRef90\_B11F3 D K E H P G T D V L H E S E F F G L G K A Q F  
UniRef90\_UPI000349134F E A P F A E G R F F T P S G K A Q A C A P G L  
UniRef90\_D6SM83 T S D H P G T P Y L F K G A F P K R I P F T P V D Y R P S E E L  
UniRef90\_R7PHB7 S T A F A D H G S F R T P S G K M M I Y N E N L E E A  
UniRef90\_D5V743 K T D T P I L H I N E F R T E D G K G Q F  
UniRef90\_I3CCR3  
UniRef90\_M7CQ42  
UniRef90\_L1KHF0 E Q S P D G T E R L Y T D G I Y G K D L V T P D G K A M I K A A G Y V P P H E E  
UniRef90\_F8D3F8 D G P D A N G D D D A A D A D E S W S F P T D S G R A Q F S S G R A R P L P E S  
UniRef90\_D8F4G9  
UniRef90\_G8TT95 E P G H P G T K T L H T R L W D D P V E P K V S F N P V E W Q P P V E E  
UniRef90\_F7UYF7  
UniRef90\_E6TJF1 R E H P H G A V P H L R T G A L K E A I A Y L R G R I Q L T H E D I A A  
UniRef90\_W7IWJ3  
UniRef90\_UPI00035FOCC4 A G H L D E D H E R L Y T D G H F F A L P N P D G R A M I K A A P Y L R P P E P  
UniRef90\_UPI00036DF337 E P G G P Q G A G M P G Q G A A L P  
UniRef90\_B8K6S8 E Y Q A W Q P V G W G T R P Y E S G Y S Y A D G K A R F V V P A M  
UniRef90\_T0D452 Q T D G F V R L P I E E V P F A D G R F L T P S E K F E F W S N A A V A D G Q S  
UniRef90\_F6AJN3 F P A E Q L E K G F R N D E A K S F G F Y L Q K G L F E E Y A Q F G R G H G H D  
UniRef90\_B9M850 A V G R A V Q L R L P E T G F Y R T S S G R I E I F N P R E E H  
UniRef90\_UPI0003600670 N L P E E W R P Y A H G A P T S G K V Q L S P A P H R E P A A A  
UniRef90\_A0EJJ3  
UniRef90\_D3FYD3 D E L H P G T E R L F E E R F A H S D G K A K M I P V P A E V K K E T  
UniRef90\_F4L8R9  
UniRef90\_J7LFF3 S P E E S T P R L F L D S F A H P D G R A R L V P V D H R P P A E E  
UniRef90\_B8FV01 E E D Q A G F S P F Y N E P E V N P L Q T P T G K I E F Y A T G L E E F F P D  
UniRef90\_UPI00041496CE K A N E H A I K G Y S N D E S E Y F G F Y V Q K G L F E E Y A L F G R G H G H D  
UniRef90\_I3REZ1 K R S W E T P S G K I E F Y S Q R A V K R G L S  
UniRef90\_K9WCM8 S L D H P G V S T L Y L D H P Q G K R F L T P S G K V E I Y T S E L E K A G H A  
UniRef90\_UPI0002D77CF6 D G K E T K W R F K E G S D P Y V K K Y G K P D G K A L I I S A P Y E A P P E V  
UniRef90\_X8BQS8 G A D H P G T P R L F L D R F A T D G R A R F V P V E P R G P A E P  
UniRef90\_UPI000405B275 D V P W S D Y Q F R T P S G K Y F V S E T A R A E G H S  
UniRef90\_F7UVZ3 G F T Y G V P K F K T A S G K F E F K T E K M T E A G L K  
UniRef90\_Q3AA07 L A P F T F S D G K F L T P S G K I E L M A G K G L G  
UniRef90\_I4A6Q1 P G D N Y G F Y K K F R D D P A A N P L G T E S G K M E I Y S R A L A Q M G Y S  
UniRef90\_W0EC37 Q N V A W E D L N F K T Q S G K I E L S S D A L K E V G E  
UniRef90\_M4UPG1 D E G D H D L G T S F L F E G N K F T T E N G R G Q L F A S E W R P Q E L  
UniRef90\_U6E9R8 Q K A P Q R M V N P N D I P F S T G K F Q T L S G K F E F I H V F E P G N N  
UniRef90\_Q8U7P1 F P L S E I N A D Y K N Q E S S D F G F Y L Q K G L F E E Y A A F G R G H G H D  
UniRef90\_K6WLA2 S A E H P G T P R V F L D R F A T P D G R A R M L P V S A A P V A D D  
UniRef90\_A1SBQ9  
UniRef90\_M1PCH9 L K A E D G I H I Q P G K D P Y G I P E E F E V R L F N E D I A D T G H P  
UniRef90\_K7RN92 T G N I E W G K F L N H T L E T E S R K I E L A P K D L V E  
UniRef90\_S9QDD6 V R E D Y E N Q E A N H F G F Y L Q K G L F E E Y A F G R G H G H D  
UniRef90\_UPI00047B79B0 D G K E T R W R Y R E G A D P Y F Q F Y G N P D G R A V I W A L P Y E P P A E M  
UniRef90\_I5BRJ0 F R P D W T G T P A N R P S P A S I G L Q G P H A R M P E F P D H M D F I E V  
UniRef90\_Q56350 F D L S E L N P V T P T A E S N A G F Y V Q K G L F E E Y A P F G R G H G H D  
UniRef90\_UPI00037607D5 L K T K I A E G G P C D G E Q W G L P W P  
UniRef90\_W0JTA8 T R E D A G G Y R Y D P A S D R W S F P T S S G R A R F S A G E G V G L P E P  
UniRef90\_B9LNQ6 S P E A E G G Y R Y D N D G W S F P T P S G R A R F S T G A H D G L A E P  
UniRef90\_E1QE75 P A D A C P G P D A F H A V E W A P P A D E P D G R  
UniRef90\_UPI00046801A3 D E K H L G T P S M Y M D K K F Y T P D G K A H F V P V V F V K N K E D  
UniRef90\_D7BG58 A E G F V R L N T P R E F L P F K D G A N T Q S G K I R F D P P P P V T L T E  
UniRef90\_UPI0003B3AE7D  
UniRef90\_V6PC80  
UniRef90\_F4CUS7 A R A S G V Q W P C N D A H P D G T E R L Y A D G R F W S A P D E C E S Y G R D  
UniRef90\_UPI0002F001ED K G D Q L K G W D D F V E K G V Y N S F G T K T G K F E F Y S E T L K A A  
UniRef90\_E5Y3B6 T G F V P L A S A P R W K T L A E T T L P T P S G K I E A R S R L W A S G H D  
UniRef90\_UPI0004652A99 D E A H P G T P L H R V I G G C A R G P G K F V A L T H Q E P A E P  
UniRef90\_R5FFP01 E G D G L G H Y A D F L K D P S R S P V Q T S S G K F E I Y C Q R F K D F G L S  
UniRef90\_K0EYK0  
UniRef90\_K8CVE0  
UniRef90\_A9FEA4 E Q P D G S W R E T R F D D P Y A T K D E T K D D R A L I W F H P Y E P P P E S

UniRef90\_UPI0003F63F17  
 UniRef90\_G9XU05 P L P T H I E P P E  
 UniRef90\_T0IWZ6 P D A E Y P F  
 UniRef90\_UPI00037D72D4  
 UniRef90\_I0H3D9  
 UniRef90\_R4X184 P D K E Y P F W L  
 UniRef90\_K9GZB5 P D D E Y D L W L  
 UniRef90\_A4EXJ0 G V P R H A P  
 UniRef90\_UPI0003FCBA32 I D E T Y P L Y I  
 UniRef90\_W7SVV2 A L P I F Y T H P E  
 UniRef90\_R4LKN0  
 UniRef90\_B8DLD3 E P G Y P  
 UniRef90\_I0LC12 V C A T Y P L H F  
 UniRef90\_W1JRT3  
 UniRef90\_D7C0X4  
 UniRef90\_Q65NC5 D V P E Y P  
 UniRef90\_Q07WV3  
 UniRef90\_C8PYN5  
 UniRef90\_U1PHV0 V D S E Y P  
 UniRef90\_X1FP41 P D E D Y P  
 UniRef90\_E1SB11  
 UniRef90\_H1FSA1  
 UniRef90\_D0CVM2 L A P  
 UniRef90\_D4H8U3 G L P T Y R A P R Q P  
 UniRef90\_UPI00037A3882 E L P A I P K W I E P  
 UniRef90\_Q1Z843 P D H Q Y P  
 UniRef90\_U5WTE2  
 UniRef90\_G8QFB2 P D A E Y D L W L  
 UniRef90\_K8ZQZ9  
 UniRef90\_B11F3  
 UniRef90\_UPI000349134F P L P D H V P N H E S A  
 UniRef90\_D6SM83 P D S E Y P  
 UniRef90\_R7PHB7  
 UniRef90\_D5V743  
 UniRef90\_I3CCR3  
 UniRef90\_M7CQ42  
 UniRef90\_L1KHF0 P G E Q Y P F  
 UniRef90\_F8D3F8 T D E A Y P  
 UniRef90\_D8F4G9  
 UniRef90\_G8TT95 P D T A Y P F  
 UniRef90\_F7UYF7  
 UniRef90\_E6TJF1  
 UniRef90\_W7IWI3  
 UniRef90\_UPI00035F0CC4 P T A D Y P  
 UniRef90\_UPI00036DF337  
 UniRef90\_B8K6S8  
 UniRef90\_T0D452 A V A T Y V P P  
 UniRef90\_F6AJN3 L A P  
 UniRef90\_B9M850 P L P C Y L P P  
 UniRef90\_UPI0003600670 L N P D F P  
 UniRef90\_A0EJJ3  
 UniRef90\_D3FYD3 P S E D F P L Y L  
 UniRef90\_F4L8R9  
 UniRef90\_J7LFF3 T D P D H P  
 UniRef90\_B8FV01 D K E P I P K W I P  
 UniRef90\_UPI00041496CE L A P  
 UniRef90\_I3REZ1 P F P E Y  
 UniRef90\_K9WCM8 A L P I F Y T H P E  
 UniRef90\_UPI0002D77CF6 P N K E Y D L W L  
 UniRef90\_X8BQS8 A D S Q F P  
 UniRef90\_UPI000405B275 G H A T Y V K P R E  
 UniRef90\_F7UVZ3 P L I G Y P R K V E P  
 UniRef90\_Q3AA07 L Y Q A Y  
 UniRef90\_I4A6Q1 K I E P I P T Y I P P  
 UniRef90\_W0EC37  
 UniRef90\_M4UPG1 P D R E Y P  
 UniRef90\_U6E9R8 S V Q G Y P  
 UniRef90\_Q8U7P1 L A P Y D A Y H E  
 UniRef90\_K6WLA2 L R P E A P L Y L  
 UniRef90\_A1SBQ9  
 UniRef90\_M1PCH9 G A P T Y  
 UniRef90\_K7RN92  
 UniRef90\_S9QDD6  
 UniRef90\_UPI00047B79B0 P D D E Y N L W L  
 UniRef90\_I5BRJ0 A D P E H P  
 UniRef90\_Q56350 L A P Y D T Y H E  
 UniRef90\_UPI00037607D5  
 UniRef90\_W0JTA8 P D E S Y P  
 UniRef90\_B9LNQ6 T D D E F P  
 UniRef90\_E1QE75  
 UniRef90\_UPI00046801A3  
 UniRef90\_D7BG58 P D E E F P L I L P P A  
 UniRef90\_UPI0003B3AE7D  
 UniRef90\_V6PC80  
 UniRef90\_F4CUS7 L V T G A P  
 UniRef90\_UPI0002F001ED  
 UniRef90\_E5Y3B6 T L P P Y T A P E R P A  
 UniRef90\_UPI0004652A99 P D A D Y P  
 UniRef90\_R5FP01 D I A P I A N Y V P  
 UniRef90\_K0EYK0  
 UniRef90\_K8CVE0  
 UniRef90\_A9FEA4 P D A E Y P F W L



UniRef90\_UPI0004716213  
UniRef90\_A7BUA3  
UniRef90\_D2PYE0  
UniRef90\_M0DEZ6  
UniRef90\_A0A013WSE0  
UniRef90\_W4A3H2  
UniRef90\_UPI00036B0242  
UniRef90\_B2JLN7  
UniRef90\_E1HV40  
UniRef90\_D6S7Y0  
UniRef90\_UPI00046E9CC3  
UniRef90\_K9HLL6  
UniRef90\_Q15TN4  
UniRef90\_Q2S7U6  
UniRef90\_I6EA50  
UniRef90\_M5IQ92  
UniRef90\_K5BG34  
UniRef90\_UPI00041B9BEB  
UniRef90\_M2X826  
UniRef90\_G8RQH5  
UniRef90\_A4TAJ3  
UniRef90\_X0RNZ8  
UniRef90\_H2CEY9  
UniRef90\_UPI000367959D  
UniRef90\_L0FAB1  
UniRef90\_G2FFF3  
UniRef90\_Q0A5X1  
UniRef90\_A3XFM6  
UniRef90\_D2RUQ8  
UniRef90\_T0J1J9  
UniRef90\_M4Z572  
UniRef90\_Q828S2  
UniRef90\_S3ZHB8  
UniRef90\_UPI000475D275  
UniRef90\_U0G0S1  
UniRef90\_K1E139  
UniRef90\_V3T0H2  
UniRef90\_UPI00035DFE55  
UniRef90\_F2G722  
UniRef90\_W4LB02  
UniRef90\_I4KVC1  
UniRef90\_A8SN47  
UniRef90\_A8ZZE8  
UniRef90\_H6R1L4  
UniRef90\_V4GRY7  
UniRef90\_A4T8R6  
UniRef90\_K0UWC8  
UniRef90\_B8HFG4  
UniRef90\_R4KBC0  
UniRef90\_G4HV67  
UniRef90\_E2ZAB8  
UniRef90\_V4Q7U6  
UniRef90\_B2A6V7  
UniRef90\_W7QOX4  
UniRef90\_S3ZQ07  
UniRef90\_Q0AC66  
UniRef90\_F4AM94  
UniRef90\_UPI00036EC001  
UniRef90\_E7QZ07  
UniRef90\_A0KD89  
UniRef90\_A4TDD7  
UniRef90\_UPI00047A7D42  
UniRef90\_X5MNB2  
UniRef90\_UPI0003796956  
UniRef90\_X7S163  
UniRef90\_Y1X1A8  
UniRef90\_UPI00037CFFA2  
UniRef90\_V1P9Y0  
UniRef90\_L8P775  
UniRef90\_B7RT98  
UniRef90\_I4BQ70  
UniRef90\_G8TXX7  
UniRef90\_UPI000255D0C6  
UniRef90\_W1UL05  
UniRef90\_B9QX58  
UniRef90\_E3BIY8  
UniRef90\_E8YI25  
UniRef90\_UPI000300FB84  
UniRef90\_V4XXE8  
UniRef90\_A0A059MJX0  
UniRef90\_W5IM17  
UniRef90\_I0RLC0  
UniRef90\_R9PH07  
UniRef90\_I4MZL8  
UniRef90\_Q0SC94  
UniRef90\_G2S7E1  
UniRef90\_H5X0B4  
UniRef90\_S4YR71  
UniRef90\_V6PXU3  
UniRef90\_I0H1U2  
UniRef90\_H8Z3R4  
UniRef90\_K2FKU9

1 10 20 30 40

T R T T C P Y C G V G C G V V A R V E G E T V S V R G D E S H P A N F G R L C C  
D K A P C R F C G V G C V M V G T Q N D R V V A V K G D E S T P I N R R G L L C C  
T S C N L C E A L C G V L V T V D D D G R V T D I R T G D E S H P P L S R G L I C C  
H R T C P L C E G M C G V T V T V E S G G R A A T V R P N K K D R W S L G H I C C  
H T F C R I C E P G C L V A D V R D D Q V V S L Q G D A E D H P F H Q G F A C C  
C T L C A M C G I R V E T R G E E I I S I K G D A E D P P F S K G F I C C  
T C T N G G P L F V V V K D G R I V R V T P S K D A P S W E I E A R  
G K K T I C G L C P G Q C H V E D G R K I K S S A D E K P S A L C L R G R L  
F C G T G C G V M V G V K D G R V V A T H G D T K A E V N R G L L N C C  
C T L C A M C G L R I E S H G D E V I S I K G D A E D P F S E G F I C C  
C L R G R

S H G C T L D C F D C C K F N V V K D N G E L K I E G D R K N H P Y T K G F I C C  
H T F C R I C E P G C L L A E V D D G V V T R L Q P D R D H P S A L C L K G V  
H K T T F C I C P L C G M I A T V E D G R L T A L R P D K D H P L S A G F A C C  
A S A C I L C E C N C G I V V Q V R D R T L A R L R G D K E H P A S R G Y T C

C P L C A M C G L R F E I D E G R I I S I R G D S E N A F S R G H I C C  
C N L C E A L C G L D I K H L N G Q V V S I A G D K E D P F S R G H I C C  
A Y T F H P P N C G G R C F K C T V R E G K L V K I E P N E W P D S V Q N K I C C  
V K D G K V V A S Q G D P D A P V N K G L N C C  
T K S V C Q Q C S T R C L L D V Y T T N G R V H A I Y G N P D A P L S N G K I C C  
C N I C E A M C G L I V T Y D E T Q V H S I K P N P A D P L S R G H I C C  
K V I C N Y C A V G C G F K A V K D G N F V A Q E P W F E N P I N N G S L C C  
D G F D C P G C A W S F E F C E N G A K A V T W E A T V K R V D P E F F A K  
H S T C P H D C S A C A L D V E V L D Q K T I R V R G S K R Q T Y T A G V V C C  
I C P L C A T C G L T L T I E G T R V T K A R G D R D D V F S K G F I C C  
I C P L C A T C G L T L T V E G P R V T G V R G D K D D A F S H G F I C C  
C P F C S V Q C I E K K E S G L K T Y K V L P K Q N A V A S E G R L C C  
K T A C P Y C G V G C G V K V D K G K I V G D D A H P A N K G A L C C

G F D C P G C A W G T F S F C E N G A K A V S W E P D F F A A H S V S A L R  
C P H D C S T C A L E V D V L D R H T I R V R G S K A N A Y T A G V I C C  
H Y S T C T L C A M C G S M T V T V E D D H L V N V R G S R V N P L T R G A V C C  
C S L E V T V E D D H L V N V R G S R V N P L T R G A V C C  
G F D C P G C A W G M V K F C E N G A K A V N W E P A F F N K Y T V S S L A

C P L C E A E C L E I T T C D K E I Q S I R G D R Q N T Y S N G F I C C  
C P L C E C G L E L T L D R D D R V L S V R G D R Q D P F S Q G F L C C  
T T C M R C A V G C G H L H R V V D T G Y G L G A Q G D V S H P V N R G M A C C  
H T F C R Y C S C G V E V T V D G N R V V K I S P D K Q N P H S C A K G R  
H T F C R Y C A G V E V T V D G N R V V K I S P D K Q N P H S C A K G R  
R D F P T N R G G L C C  
C W H N C G G K C L K A L V V E G V V V R Q K T D D B C N P Q Q R A C L R  
C G I V A D V A D G Q V V R T R G D L L H P V I S E G Y I C C

H G F D C P G C A W S A F E F C E N G A K A V T W E A T K K R A T P E H S V R  
C S G C S W C S K E A N V V N G R V I K V R G N K N S K V N C P R A H  
T K N I C A Q C P A R C I D V Y T T D G R V H A I Y G D T G N P L A N G K L C C  
D G F D C P G C A W G A K A V A E A T L R R V T P D F F A A H P V S D L A  
T K N I C H Q C P A R C I N V Y T T N G R V H A I Y G D P G N P I A N G K L C C  
E G F D C P G C A W A T F E F C E N G A K A V A D E A T T K H S V D K M R G Q  
G F D C P G C A W G E V N F C E N G A K A V N W E A T Q R R V D  
S V C P C C S V G C R V R Y S D R R D G A V G C D G A P V N E G R L C C  
D G F D C P G C A W S T F Q F C E N G A K A V T W E A T T K R V T P E F L L R  
H R V T C P L C A M C G L K I T V S D G V A T S A R G N A D D V W S R G H L C C  
C T L C R S R C G A V N H V E R G R L V A V T P L T T H P T G C A K G R  
S T A C N L C Y A N C G I V Q V G G E D R I T R V K G D K N H P A S R G Y T C  
C P L C A T C G L D V T F D A R V V G V R G D A E D V F S R G Y T C  
F C R V C T S V C G I L V D V E G D E V L R V R G D Q D H P F S C P K G R

T A C I L C E S N C G L E V Q V Q D R A L V K I R G D K A H P A S A G Y T C

I C P L C A T C G L T L T I E G T R V T G A R G D R D V F S Q G F I C C  
M V A T V E D D R L I A I A P D T D N G Y T C V K G R  
I C P F C A T C G L T L T I D D G R V T G A R G D R D D V F S A G Y I C C  
C S H D C Y D T C C S V E L T V N Q D R I V R V A G S R L Q P L T R N F V C C  
T R S V Q T H C P Y C A L Q C A M T L T V T S R P D A E F P T N R G R L C C  
T T C P H C A T G C Y Y L V V K D N K I V D V E A A N G A S N K G L L C C  
N G D V K R L N G A K D N A Y T A G V I C C

D G F D C P G C A W G E L E E K C E N G K A V N W E A T A R R V R  
D G F D C P G C A W S T F E F C E N G V K A V R V T P A F F A E H T V A E L M  
D G F D C P G C A W G A K A V A E A T L R R V G P A F F A E H S V P Q L A  
D T T V C P F C A V G C R L A P G S D G R A V G H E G P A N P D R L C C  
A E G F D C M S C A W S V A E F C E N G A K A V A E E A T R R R A T P E F F A A  
S G F D C P G C A W G L V K F C E N G A K A V N W E P D F F A K Y S V S A L A  
C I L C E C N C G I E I Q L D G R R L A R R I G D K R H P S S A G Y T C

H G F D C P G C A W G T F R F C E N G A K A V N W E A S S K R V D  
H H R A C H L C E C G L T I E T Q A D E K I S I K G D P L D T F S R G H I C C  
A E G F D C M S C A W H A E F C E N G A K A V A E E A T R D R A T P E F F A C C  
D G F D C P G C A W S T F Q F C E N G A K A V T W E A T S K R V T P E F L A K  
H H H S C T L C A T C G I T V I A D D R V V S I R G D S D D P V S A G Y I C C  
C T L C A M C G I E I K H D G K V L S I K G D S D P F S K G Y I C C  
F C G T G C G V L V G T Q Q G R V V A C Q G D P D A P V N R G L N C C

D G F D C M S C A W H A A E F C E N G A K A V S W E A D R A D F F A E H S I A  
C P L C A C C G L L F T L E G D Q V T R V R G D R D D P L S C G F M C

UniRef90\_UPI0004716213 A L G E T T G L Q G R L H P V V 50 60 70 80 D G V E  
UniRef90\_A7BUA3 I K G Y F L Y G E D R L T T P L L R M K D G Q H D K N G E F T P  
UniRef90\_D2PYE0 P K A V A L D D P D R L T T P V R R T P D G W Q E  
UniRef90\_MODEZ6 G R G I R E S A G E W L T R P L V R R D D E L V P  
UniRef90\_A0A013WSE0 P K G T T L H D P D R L R T P M I R D G S E W K S  
UniRef90\_W4A3H2 H K G V H H D D P N R L D R P L K R T N P R H E E V G D F V P  
UniRef90\_UPI00036B0242 P K A V A L N D D P D R L R Q P L I R R T T D G W E E  
UniRef90\_B2JLN7 G R R F S V Y S D K R I L H P M K R V D F D P D G E R N P Q N R R T G K S G Y V P  
UniRef90\_E1HV40 S S R W R V Y S P D R I K Y P M K R V G K R G E G K F K R  
UniRef90\_D6S7Y0 Y S D E L L N S E D R L T D P L I R T G E K G T L E F K K  
UniRef90\_UPI00046E9CC3 A Y A E R T H H P D R L M H P L K R V G A K G E G K W E R  
UniRef90\_K9HLL6 V K G Y F L Y G R D R L E Q P M L R M R D G E Y A K D G E F T P  
UniRef90\_Q15TN4 P K A A A L D D P Q R L L R Q P M R K T A S G F E P  
UniRef90\_Q2S7U6 P K A V A L N D P D R L R Q P L R R T A D G W E E  
UniRef90\_I6EA50 S I R R R L N H P D R L N Y P M K R V G K R G E G K F E R  
UniRef90\_M5IQ92  
UniRef90\_K5BG34 P K G A V N D P D R I T H P M R R R A D G G F E P  
UniRef90\_UPI00041B9BEB K K G L A H L D R L N H K D R I Y K P M L K K D N K W I E  
UniRef90\_M2X826 H Y L Q V H R D P D R L D P L R R V N P R S E R G V F E P  
UniRef90\_G8RQH5 Q K G V A V N D P D R V T Q P L R R T G P K G L R A S A S S A D G G F E P  
UniRef90\_A4TAJ3 N K A L R L D H P N R L T S P M R R R P D G T Y E E  
UniRef90\_X0RNZ8  
UniRef90\_H2CEY9 P K G P E L E D P D R L K R P I K R V G D Q W V P  
UniRef90\_UPI000367959D P K A V A L E D P D R L R K P Q K K V V A A D G G V S W A E  
UniRef90\_L0FAB1 S E G E R V Y S P D R L K T P M K R V G E R G E G K F V P  
UniRef90\_G2FFF3 I K G Y F L Y G K D R L T T P M L R K K N G K Y D K N G K F E A  
UniRef90\_Q0A5X1 P K P Y L L Y D A D R F K G P M K R T N P K K G R N E D P G F V P  
UniRef90\_A3XFM6 P K A I A L T D P D R V T T P L K K V D G V F V P  
UniRef90\_D2RUQ8 S K G A G I H S P K R L K H P M K E D G E W R R  
UniRef90\_T0J1J9 H T V H R L E D A G R L T E P L R Y D P E T D H F V P  
UniRef90\_M4Z572 A Y A E R L H H P R L T H P M R R V G P K G S G F A R  
UniRef90\_Q828S2 P K G A S F G D P D R L R T P L V R E D G E L R E  
UniRef90\_S3ZHB8 P K G A S F G D P D R L R R P L V R K N G T L E E  
UniRef90\_UPI000475D275 I K G M N A Y S G E R I T T P L I K K D G V F M P  
UniRef90\_UOG0S1 A L A E S L N M P S R L L Y P K F N G K E  
UniRef90\_K1E139 M R G A D G E L H P  
UniRef90\_V3T0H2 R Q S D Y L E Y Q G R L T H P M R Y D R Q H D H Y V P  
UniRef90\_UPI00035DFE55 A Y A E R A H H P D R L T K P L L R T G P K G S G Q F A E  
UniRef90\_F2G722 P K A S A L D D P D R L K R P V K R V G D N W Q E  
UniRef90\_W4LB02 R Y P E W V H G P S R L Q T P L R R V G Q K G E G R F E A  
UniRef90\_I4KVC1 A Q S Y W L E Y Q G R L T H P M R Y D D S L D R Y V E  
UniRef90\_A8SN47  
UniRef90\_A8ZZE8 P K A L A L N D P D R L K Y P V K R T G N E W R Q  
UniRef90\_H6R1L4 P K G A S L G D P D R L T E P M V R D R A T G T W R A  
UniRef90\_V4GRY7 G I E E S V D P D G W L E R P L I R K G S T L V A  
UniRef90\_A4T8R6 T A A Q L V E H P R R I L N P M R R V G D E Y V A  
UniRef90\_K0UWC8 T A H Q V V E H P R R I V A P M K R V D G R Y V E  
UniRef90\_B8HFG4 R K G W T L N H P G R I T E P L L K G P D G I H R P  
UniRef90\_R4KBC0 G R A E Q F E G A D R L K Y P M K R K H W K P G G G D K S L R G K D E W E R  
UniRef90\_G4HV67 S K G A A M G H P D R V R N P M R R T T T G D F V E  
UniRef90\_E2ZAB8  
UniRef90\_V4Q7U6 E L L T W H D H D G R L T H P M I Y D P A T D H Y V E  
UniRef90\_B2A6V7 L S L Q Q L Y D P D R L K Q P M K R T N P D K G R D V D P D F V P  
UniRef90\_W7Q0X4 P K G H F L Y D P D R F K S P M K R T N P N K G R D E D P G F V P  
UniRef90\_S3ZQ07 T R G F W L G Q Q G R L T H P M Y L A E G S D H Y E A  
UniRef90\_Q0AC66 P K G H L L Y D P D R F K G P M K R T N P N K G R D E D P E F V P  
UniRef90\_F4AM94 S D R W L N D Q G R L V Q P M W L P E G A S H Y Q P  
UniRef90\_UPI00036EC001 A A F F A R H S V S A L R Q S D Y W L E Y Q G R L T E P M R Y D A A I D R Y V P  
UniRef90\_E7QZ07 D A F D G L N A A D R L T D P L I R E E G N L V S  
UniRef90\_A0KD89 M S D Y E L E N M G R L T H P L V Y D R A T D T F R A  
UniRef90\_A4TDD7 S L H Q I L H H P D R L R L P L V R S R S G E H V Q  
UniRef90\_UPI00047A7D42 A A P E M V G G T G R L L R P M R R T N P R G A A D P G W R E  
UniRef90\_X5MNB2 N K A Y Y V N G K D R L T S P L R R R D D G T F E E  
UniRef90\_UPI0003796956 P K G A S L H D P D R L R A P L V K R D G E F T E  
UniRef90\_X7S163 A L P Q L H H H P D R L E R P R M R A D G R L R D  
UniRef90\_Y1X1A8  
UniRef90\_UPI00037CFFA2 E K P L R L D H P H R L T S P L R R R P D G T Y E E  
UniRef90\_V1P9Y0 P K G A S F G D P D R L R T P L V K R G E G K F E R  
UniRef90\_L8P775 Q M L E Q I Y H P G R L E Q S Q K R L P D G E F E A R K D G E L R E  
UniRef90\_B7RT98 P K G A S F N D P D R L T A P L V R R D G V L V E  
UniRef90\_I4BQ70 Y K V N H V N H P D R V L Y P L K R V G A K G Q G T F Q R  
UniRef90\_G8TXX7 R K G A T L T R G D R L T A P L L R D A D G L R K  
UniRef90\_UPI000255D0C6 G C F D F V H S P D R I K Y P L I K N H E T E E F E R  
UniRef90\_W1UL05 A Y A E R L Y H P E R L K P L R R V G K K G E G R F E E  
UniRef90\_B9QX58 A D F F A T Y P V S W L T K Q D Y F L E E Q G R L S E P L I Y D A Q S D H Y R P  
UniRef90\_E3BIY8 A Q S D F L E Q H G R L T D P L V Y D A I S D R Y V P  
UniRef90\_E8YI25 E R G Y W L G Q Q G R L T E P M Y L P E G A E H Y E P  
UniRef90\_UPI000300FB84 A K F R A F D E G E R L T R P R V R R G G E L V P  
UniRef90\_V4XXE8 H S I A D L D S H S E H W L G R Q G R I T Y P M L K R P G A T H Y E P  
UniRef90\_A0A059MJX0 G Q S Y W L E Y Q G R L T H P M R Y D A A T D H Y V E  
UniRef90\_W5IM17 E K P L R L D H R H R L T T P L R R R A D G A Y E Q  
UniRef90\_I0RLC0 A S F F A Q H S V Q W L K Q S D Y F L E Y Q G R L A E P V V F A P G S D H Y Q A  
UniRef90\_R9PH07 P K A V A L N D P D R L R Q P M L R S G S W H P  
UniRef90\_I4MZL8 H S E H W L G Q Q G R I T H P M V K R P G G T H Y E P  
UniRef90\_Q0SC94 N T V T S L L A K S D Y E L E G Y G R L T R P L R Y D R A S D T F R P  
UniRef90\_G2S7E1 P K A T A L E D P D R L R R P L V R G G V D E W F E  
UniRef90\_H5X0B4 P K A T A L E D P D R L R H P V E R T A K G W K E  
UniRef90\_S4YR71 I K G Y F L Y G K D R L T Q P L L R M K N G K Y D K E G E F T P  
UniRef90\_V6PXU3 D L A G Q T D H W G R L T H P M V R R E G A T H Y E P  
UniRef90\_I0H1U2 T K G A A L P E L H A D P D R L R R P L R R T A T G W E E  
UniRef90\_H8Z3R4  
UniRef90\_K2FKU9

UniRef90\_UPI0004716213 G D W T L A L G A A G E R L R A L I D T W G P Q A V A F Y A S G Q L L T E D Y Y 90 100 110 120

UniRef90\_A7BUA3 V S W D D A F T I M A E K W K K A L K E K G P N G I G M F G S G Q W A V W D G Y

UniRef90\_D2PYE0 I L G W D E A T A Y V A A R L T A I Q Q E N H G R N A V G V Y L G N P N

UniRef90\_MODEZ6 T T W E N A M C L V A G A V S D A A A E N P D E V A V L G S G Q Q T N E A A Y

UniRef90\_AOA013WSE0 A S W E A A F D R L E T L V D G V R E R R H G P H A F A A Y G G N M A

UniRef90\_W4A3H2 I D W D D A V R E L A D K L G D I R R R Y G R N A V L A V Y Q G N P S A F N G T Y

UniRef90\_UPI00036B0242 I S W Q E A L D Y T A Q R L I Q V R E E F G K N A V G V Y L G N P N

UniRef90\_B2JLN7 I S W D E A L D I V A K E I N R Q K R V H G P G S I T F P M S S H H Q W G N V G

UniRef90\_E1HV40 I S W D E A T A F I A A E L K R V I E K Y G N E A I Y F N Y Q S S G A Y Y

UniRef90\_D6S7Y0 A S W D E A M K L I K E K C S K I L I E Q Y G A K S I A S H F G G A F D T S N D

UniRef90\_UPI00046E9CC3 I S W E E A L D T V A N K F L E Q E K K L G P E T V W P Y Y Y A G T M G L V H R

UniRef90\_K9HLL6 V S W D R A F D E M A R Q W K T L E E K G P T A I G M F G S G Q W T V W E G Y

UniRef90\_Q15TN4 I G W E A L D T V A E K L H G I Q H K H G K D A V G V Y L G N P N

UniRef90\_Q2S7U6 I S W S E A L D Y T A Q R L I Q V R E E H G R N A L G V Y L G N P N

UniRef90\_I6EA50 I S W D E A L D T I A S S L K K T V I E Q Y G N E A V Y I Q Y S S G I V G G N M T

UniRef90\_M5IQ92 I S W D Q A L T E I A A R V D D I H R R H G S A A F G W Y M G N P A A

UniRef90\_UPI00041B9BEB I S F E E A L E I M A K K L K E Y K E K F S N S I L Y Y E Q

UniRef90\_M2X826 V G W D D A V R D I A A R L Q D I R R R Y G R N A I A S H Y Q G N P S

UniRef90\_G8RQH5 I S W D E A M S D I A A R L A D I H R R H G S G A V G W Y Y G N P G A

UniRef90\_A4TAJ3 I D W E T A I S E I A D G F R A I A A N H G G D T I L Y Y G G G G Q G N H L G G

UniRef90\_X0RNZ8 V S W T E A L S D I A R R V V E I I Q Q R S G H D A V A F Y A G N P T V H N Y

UniRef90\_UPI000367959D I G W E Q A F R E I V T D R L R A I R A E S G P N S I L W A G S T G F Y G G N P S

UniRef90\_L0FAB1 I S W D E A L G T I A D K L L E L T S K Y G G E S I L W A G S T G F Y H Y P M L L

UniRef90\_G2FFF3 V S W D E A F K T M A E K W V A A R K A K G P K G V G M F G S G Q W T V W E G Y

UniRef90\_Q0A5X1 I S W D E A L D T V A A R L T A V R E R N E S H R F V V A Y G R G W P A D A G

UniRef90\_A3XFM6 I S W D E A Y D F A V A R L D A V R K L H G K D G V G V Y L G N P A H K F

UniRef90\_D2RUQ8 V T W D E A Y Q E I V D T W E E T V I E Y S R E S V M L L G S A H H S N E A A Y

UniRef90\_T0J1J9 I S W D E A F A R A G A V L R E L L D D P H A C E F Y C S G R A S N E A A F

UniRef90\_M4Z572 I S W D E A L D E I A E R F L L A E R D F G A Q S V W P Y Y Y A G T M G L V M R

UniRef90\_Q828S2 A T W E E A F D A V A A G L R P V V I E H G P H A V G V V L G N P N

UniRef90\_S3ZHB8 A S W E E A F D A V A A G L R P V V I E R Y G R H A V G V V L G N P N

UniRef90\_UPI000475D275 A T W E E A Y A L I S T E F S R I I Q S E Y G R D A I G V Y G G S L T N E A S Y

UniRef90\_U0G0S1 I S W D E A T D V I A E A M N S I Q T E G P D S V A M Y V I S G Q L L T E D Y Y

UniRef90\_K1E139 T G W D E V L D L L A G R L R E I A T E H G P D A V A V F G G G L T N E K A Y

UniRef90\_V3T0H2 I S W D D A F A L I S R H I L H E M A H P D Q L E L Y T S G R A S N E A S F

UniRef90\_UPI00035DFE55 I G W D E A L D R V A E A F M E A E A R H G A Q S V F P Y F Y A G T M G L I Q R

UniRef90\_F2G722 I T W D E A F D L V A N K L H G I R Q D E Y H G E D G V G V Y L G N P N

UniRef90\_W4LB02 I S W E A A L D E I Y G R F T A I R Q Q D Y G S Q A I T P L N Y S G P H G

UniRef90\_I4KVC1 I T W D D A F A L I A K H L N E L E S P D Q A E F Y T S G R A S N E A A Y

UniRef90\_A8SN47 I S W N Q A F D E I E Q Q I K K I R G H H G D N A L A T F M G N P N

UniRef90\_A8ZZE8 V S W D D A F D L I A E R F P A V T A E Y G K Q S A A L Y L G N P N

UniRef90\_H6R1L4 T T W E D A L D R A V S G L S A A L E R D G P D G V A V L G S G Q Q T N E A A Y

UniRef90\_V4GRY7 A G W D E A I A D I A T R M N A A I D A D G P D A V G V Y Y G N P A

UniRef90\_A4T8R6 T G W D E A I D D I A A R L N A V I D A D G P D A V G A Y Y G N P A

UniRef90\_K0UWC8 I S W D Q A L D L A A T A V K D A R T R Y G A D A V I G V F G G G L T N E K A Y

UniRef90\_B8HFG4 I S W N E A L K Y I A D E I T R V K N K Y G V E S I F S T S T E P G P

UniRef90\_R4KBC0 V D W E S A L D D I A R R L T A L C R A S G P D S I A V Y M G N P

UniRef90\_G4HV67

UniRef90\_E2ZAB8

UniRef90\_V4Q7U6 I S W D E A F Q R T A T A L N T L P D P N M A E F Y T S G R A S N E A A F

UniRef90\_B2A6V7 I S W D E A M E E I A D K I L E L R E Q D E N H K I A V Q R G

UniRef90\_W7Q0X4 I S W D E A L D T V A E R L N G L R E R G D E S H R F A H F Y G R G W G A S D A G

UniRef90\_S3ZQ07 V P W E R A F D I V A E E L N A L A L A S P D E A L F Y T S G R T S N E A A F

UniRef90\_Q0AC66 I S W D E A F D I V A E R L N R L R E S R G E S H R F A H F Y G R G W G S S D A

UniRef90\_F4AM94 I E W A E A F K L I A Q Q L A R L A Q S P N E A A F Y T S G R T G N E A A F

UniRef90\_UPI00036EC001 I S W D D A F A L I A R H L R A L E S P D Q A E F Y T S G R A S N E A A Y

UniRef90\_E7QZ07 V T W E K A F D R I E A E F E T V L D D R G P D A L A F F G A P R C T N E E N Y

UniRef90\_A0KD89 I E W D D A F A R L G E V L R A L P P E Q V E F Y T S G R A S N E A A Y

UniRef90\_A4TDD7 V S W D D A F T E T E R V L R P V L R D R Y G A R A V T V Y L G N P A H N L

UniRef90\_UPI00047A7D42 I S W T D A L D E I A A R L A A A R D Q H G A E S V A F A V T T P S G T P M V D

UniRef90\_X5MNB2 I D W D T A I T E V A T K M A A I R D E H H G D K I F R Y G G G Q G N H L G G

UniRef90\_UPI0003796956 V G W D E A F A E I D A K L P G I I G E H H G K D S V A V Y A G N P S A H N L

UniRef90\_X7S163 T T W D A C L D D L G T R L K D I I D R H G P Q S V A F Y F S T

UniRef90\_Y1X1A8

UniRef90\_UPI00037CFFA2 I D W N T A I T E I A A K L G A I R D T H G G D K I F Y Y A G G G Q G N H L G A

UniRef90\_V1P9Y0 I S W D E A L D T I A D N L K R I I A N Y G N E A V H V I Y A T G V A G G N I

UniRef90\_L8P775 A T W E E A F D A V A A G L R P V V E R Y G P D S V I G I V L G N P N

UniRef90\_B7RT98 I G S Q K A M D E I A D K L K A L L A E Y G P R S I A S Y N G T Y

UniRef90\_I4BQ70 A T W D E A F A A V A E G L G A A V R D H G G A S V G V Y L G N P N

UniRef90\_G8TXX7 V S W D Q A L S E V A E R L Q Q I R D T V G G E A I L P Y S Y S G N M G V

UniRef90\_UPI000255D0C6 T D W D T A L D H V A S R I T A L Q T E H G R D A V G I F G S G G L T N E K T Y

UniRef90\_W1UL05 A T W M K H L V A S K F L E I K R K Y G S D A L A G F A C S R S P N E D C Y

UniRef90\_B9QX58 I S W D T A F L D L I A Q K F L E A E A F G A E S V W P Y H Y A G T M G L V Q R

UniRef90\_E3BIY8 I E W D Q A F S L I A A H L Q A L E D P N Q A E F Y T S G R A S N E A A Y

UniRef90\_E8YI25 I G W D E A F D L I A S H L K R L D D P D Q A A F Y T S G R A S N E A A F

UniRef90\_UPI000300FB84 V S W E R A F D I V A E E L T A L S S P D E A V Y Y T S G R T S N E A A F

UniRef90\_V4XXE8 V D W P T A L D A A V D A L G G V R D A H G P D A L A F L G A P H C T T E E N Y

UniRef90\_AOA059MJX0 I D W D E A F A L T G A E L E A L D S P D E A I F Y T S G R A S N E A A F

UniRef90\_W5IM17 T T W D E A F A L I A R H L K A L K S P D E A E F Y T S G R A S N E A A F

UniRef90\_I0RLC0 V D W A T A F Q E I A A R L T Q V R D T Y G G D K I F Y G G G Q G N H L G G

UniRef90\_R9PH07 I S W D D A F K L I A E H L H Q L V S P D Q A E F Y T S G R A S N E A A F

UniRef90\_I4MZL8 I S W Q E A F D T V A A R L W D I Q Q R H G Q D A V A I Y Q G N P S

UniRef90\_Q0SC94 I E W D E A F A L I G N Q L N A L D S P D E A I F Y T S G R A S N E A A F

UniRef90\_G2S7E1 V E W E E A F E R I G E V L R G L E P D Q V E F Y T S G R A S N E A A Y

UniRef90\_H5X0B4 V S W P A A I E L A A A G L R D V R Q R H G K H A L A V Y Q G N P T

UniRef90\_S4YR71 I S W T E A L D K V A A G I G A V Q K H G K N A F G V Y L G N P N

UniRef90\_V6PXU3 I T W D Q A F D V M E E K F K T A L K E K G P E S I G M F G S G Q W T I W E G Y

UniRef90\_I0H1U2 I S W D E A F A L A G S F L A A L P S P D E A A F Y T S G R A S N E A A F

UniRef90\_H8Z3R4 L D W P A A L D F A A A G L R A V K Q A H G P D A V A V Y R G N P

UniRef90\_K2FKU9

UniRef90\_UPI0004716213 A A N K L M K G F L I G A A N I D T N S R L C M S S A V V G Y K R A F  
UniRef90\_A7BUA3 A A V K L M K A G F R S N N L E P N A R H C M A S A V A A F I R T F G A D E P M  
UniRef90\_D2PYE0 V H S L G A M T H M P T A V R Y L L R T R N R F S A T S V D Q L P H M L A C H L L  
UniRef90\_MODEZ6 A L I G K L A R G G L G T R M Y D A N T T L C M A S A V T A Y R A F  
UniRef90\_AOA013WSE0 G K D A T L S R Y S G L M L A T S G I Q Q V Y S S G T V D Q H P K N L S A M L M  
UniRef90\_W4A3H2 Y A N A A A L A R G F D T R M R F S A G T Q D T S A K Y A A S E A L  
UniRef90\_UPI00036B0242 V H D H G K M L M V P F L R S L A T R K R F S A T S L D Q L P H M L A N L K M  
UniRef90\_B2JLN7 Y Y L S A L T R F A N L I G F T R N P D S W E G W Y W G A M H H F G N S M R V G  
UniRef90\_E1HV40 H N Q G T P A W K R L L N L N G G F L Q Y Y N N Y S N A Q N F T A T S Y T Y G A  
UniRef90\_D6S7Y0 F I S I Q M P N A D N G G F L S P I G S P N N G S S L C F V S F G I F A P Q T V  
UniRef90\_UPI00046E9CC3 D G I N R L R H V K K Y A G Q E S T I C I N L A R A G W K A G  
UniRef90\_K9HLL6 A A S K L M R A G F R S N N L D P N A R H C M A S A A V T F I R A F G I D E P M  
UniRef90\_Q15TN4 A H N M G S L L F G P Y F Y R A L N T H N R Y S A T S V D Q L P H H I V S R Q M  
UniRef90\_Q2S7U6 V H D H G N T L F L P F L R A L A T R K R F S A T S L D Q L P H M L A N L T M  
UniRef90\_I6EA50 R S S P S A S A V K R L M N C Y G G S L N Q Y G S Y S T A Q I S C A M P Y T Y  
UniRef90\_M5IQ92  
UniRef90\_K5BG34 F S Y A H L F E A A L T F I K G I G R H S H Y F T S S S Q D T S N R L L A S Q L L  
UniRef90\_UPI00041B9BEB Y G N G A V L K S L G D I F F Y G G V S K Q K G G P C W S A G M A A Q K L D  
UniRef90\_M2X826 A F N G A Y Y A N A T L A R G F D T R M R F S A G T Q D T S A K Y A A S E A I  
UniRef90\_G8RQH5 F S Y S H T L S L T A F M L G F G P K L H V F T A G S Q D V N N R F V A S Q L L  
UniRef90\_A4TAJ3 A Y S G A F L K A L G S H Y R S N A L A Q E K T G E H W I D  
UniRef90\_X0RNZ8  
UniRef90\_H2CEY9 G S M L F G D R F S K A L K T K N R F S A T S V D Q L P H Q L L S Y L M  
UniRef90\_UPI000367959D V H N S G T L L C A P G F I K A L R T R T I F S A S S V D Q Y P H H F A A W Q L  
UniRef90\_L0FAB1 L P Q L L G S Q I I T M Y D I G L D T T A A  
UniRef90\_G2FFF3 A A S K L I K A G F R S N S L D P N A R H C M A S A V G A F M R G F G I D E P M  
UniRef90\_Q0A5X1 G F G T W G R L Y G S S S I G I G H S S I C A D S G S K K V K R A M D G N D S Y N  
UniRef90\_A3XF6 L N L T L P R L V K A L G T N N R Y S A T A D Q L P H H V A S I H M  
UniRef90\_D2RUQ8 A S R K L A A F M G T N N V D H Q A R I C H S P T V T G L A N T W  
UniRef90\_T0J1J9 L Y Q L F A R E F G T N N F P D C S N M C H E A T S V G L P K S I  
UniRef90\_M4Z572 D G L N R L T H V K K Y S R F Y S T I C A N V A R V G F A I G  
UniRef90\_Q828S2 V H T M A G A L Y P P V L L A G L R T H S L F T A S T V D Q M P K H V S S G L L  
UniRef90\_S3ZHB8 V H T M A G A L Y P P L L L A G L G T R S L F T A S T V D Q M P K H V S S G L L  
UniRef90\_UPI000475D275 L L I G K F A R V A L Q T K Y I D Y N G R F C M S A A A T A G N K A F G I D R G L  
UniRef90\_U0G0S1 V A N K L M K G F V I G S A N I D T N S R L C M S A A V V A H N R A F  
UniRef90\_K1E139 Q L I G K F A R L A L R T K H I D Y N G R F C M S A A A A A N R S L G M D R G M  
UniRef90\_V3T0H2 L Y Q L F G R M V G T N N F P D C S N M C H E A S G T G L K Q S I  
UniRef90\_UPI00035DFE55 D G I H R L R H L K G Y S R Q Y D T I C S T A S S A G F A A G  
UniRef90\_F2G722 A H N M G A I L F G P Y F Y R S L K T H N R Y S A T S V D Q L P H H I L S R R L  
UniRef90\_W4LB02 L L A V I G S M D L R F Y K L G A S R L A R P L C G G I K S E A L V G T  
UniRef90\_I4KVC1 L Y Q L F V R A Y G T N N F P D C S N M C H E A S G L G M D D S V  
UniRef90\_A8SN47  
UniRef90\_A8ZZE8 V H Y H G N M L Y I G M L I K T L K T K N R Y S S S S L D Q L P L M M C C Y L M  
UniRef90\_H6R1L4 A H S V A G A L Y V P A L I R G L G T K N L Y S A S T A D Q M P K Q V S C G L M  
UniRef90\_V4GRY7 A L I G K L A R G G F G T R Y D A N T T L C M A S A V T A Y Y D A F  
UniRef90\_A4T8R6 G F S S S N I V F M N G W L D A V G T H S R Y A V G S I D Q N A M H V V A Q A M  
UniRef90\_K0UWC8 G Y S S S N L M F M N G W L D A V G T F N R Y A V G S V D Q N A M H V V A E K M  
UniRef90\_B8HFG4 Q L I G K F A R L A L G T S R I D Y N G R F C M S A A A A G M R A F G  
UniRef90\_R4KBC0 L L N K L G S Y V S H W G T S S Y G A W Y A I P H I L G V G D G I  
UniRef90\_G4HV67 A A F S L S H M F W A K G F V D A I G S K Q F F S A M S Q D N A S R S V A S H F  
UniRef90\_E2ZAB8  
UniRef90\_V4Q7U6 L Y Q L F V R A Y G T N N F P D C S N M C H E A T S V G L A Q V I  
UniRef90\_B2A6V7 R Y T Q L R D I I Y S H V P A I L G T P N N I S H S S I C A E A E K F G P Y Y  
UniRef90\_W7QOX4 L Y G D F G K L Y G T P N S A L G H A S M C A E G S K R A K R A T D G N D S Y N  
UniRef90\_S3ZQ07 L Y Q L F A R E L G T N N L P D C S N M C H E S S G S A L T E T L  
UniRef90\_Q0AC66 G L Y G D F G K L Y G T P N S A I G H A S M C A E G S K R A K R A T D G N D S Y  
UniRef90\_F4AM94 L Y Q L F V R K F G T N N L P D C S N M C H E S S G V G L G E T I  
UniRef90\_UPI00036EC001 L Y Q L F V R A Y G T N N F P D C S N M C H E A S G V A L G Q S I  
UniRef90\_E7QZ07 L L I Q K L A R V L G T N N V D N R A R I C H G S V V A A M V E R L  
UniRef90\_A0KD89 L Y Q L F A R E L G T N N F P D C S N M C H E P T S V G L P Q S I  
UniRef90\_A4TDD7 G L I Q T Y I G A L I G M A G A V G M P A Y Y T P G T V D Q W P L N V V S A L L F  
UniRef90\_UPI00047A7D42 S F E W V L I Y A V E V C G W H K D Y A H A L T F G R G I G V P D L E H T E T V  
UniRef90\_X5MNB2 A Y F S S V R A A L G M K Y Q T N A L A Q E K T G M A W V M  
UniRef90\_UPI0003796956 A S T L Y G R V L F K A L G T R N F Y T A G S V D Q L P H H Y S G Y L  
UniRef90\_X7S163 M E S A G F R M A E A L H A A I G T P A K F S P L T I D G T A K P L V I S D I V  
UniRef90\_Y1X1A8  
UniRef90\_UPI00037CFFA2 A Y G R S L L H A V G G V Y Y S N A L A Q E K T G E G W V D  
UniRef90\_V1P9Y0 T K S S M P F R L M N S C G G F L G R Y G T Y S T A Q I T A G M N Y L Y G G R S  
UniRef90\_L8P775 V H T M A G A L Y P P V L L A G L R T R S L F T A S T V D Q M P K H V S S G L L  
UniRef90\_B7RT98 S F Q N S A A H G M A R A F H A A L D A P N Y F T S V T I D Q P A K V A I A P A  
UniRef90\_I4BQ70 A H T V A G A L Y P P L I T R G L G T H Q V Y S A S T L D Q M P K H V S L G L M  
UniRef90\_G8TXX7 L S E A S M D R R V F H A L G A S E L E R T I C T G A A D W V L T A M F G Q R L  
UniRef90\_UPI000255D0C6 A L I G T F A R T V L G T A Q I D Y N G R F C M S A S K A S T L A F G L D R G M  
UniRef90\_W1UL05 M M Q K L V R C A F G T N N V D N C A R V C H S A S V A G L A M T L G  
UniRef90\_B9QX58 D S I H R L R H A K G Y S R Q F D C S F C T N M A W T G Y V A G  
UniRef90\_E3BIY8 L Y Q L F V R R F G T N N F P D C S N M C H E A S G V A L K Q T I  
UniRef90\_E8YI25 L Y Q L F V R M Y G T N N F P D C S N M C H E A T S R G L P G T V  
UniRef90\_UPI000300FB84 L Y Q L F A R E F G T N N L P D C S N M C H E S S G S A L T E T L  
UniRef90\_V4XXE8 L L I Q K L A R T V G T N D V D N R A R A C H G L A T G A V R R R L  
UniRef90\_A0A059MJX0 A Y Q L F A R A F G T N N L P D C S N M C H E S T S I A L Q E S I  
UniRef90\_W5IM17 L Y Q L F V R A F G T N N F P D C S N M C H E A S G L G M A E T L  
UniRef90\_I0RLC0 I Y N R A L Q A A L G V R Y F S N A L A Q E K T G E M W V D  
UniRef90\_R9PH07 L Y Q L F V R R Y G T N N F P D C S N M C H E A S G H A L T A S I  
UniRef90\_I4MZL8 V H N Y G L M T H G G Y F L G L L K T R N R Y S A T S V D Q L P H H L S S F L M  
UniRef90\_Q0SC94 A Y Q L F V R A F G T N N L P D C S N M C H E S T S I A L Q E S I  
UniRef90\_G2S7E1 L F Q L F A R E Y G T N N F P D C S N M C H E A T S V G L P R S I  
UniRef90\_H5X0B4 A H N L G L I T Y G P F F R A L R T P N L Y S A T S A D Q L P H M L A A L Q M  
UniRef90\_S4YR71 V H N L G G M L T I K Y L L N S L K T R S R F S A T S V D Q L P H H I V S M H L  
UniRef90\_V6PXU3 A A S K L F K A G F R S N N I D P N A R H C M A S A V V G F M R T F G M D E P M  
UniRef90\_I0H1U2 V Y Q L L A R A F G T N N L P D C S N L C H E S T G T A L L R T I  
UniRef90\_H8Z3R4 N A H S L G L L L F G H G V I R A L G T H N L Y S A T S M D Q P H M L V A L R M  
UniRef90\_K2FKU9

UniRef90\_UPI0004716213 G E D V V P C N Y E D V E N S D L V V L V G S N A A W T H P V L Y Q R L V Q A 170 180 190 200  
UniRef90\_A7BUA3 G Y G H Q L M V P C N Y D D L E N A D A F V L W G A N M A E Q H P I L L W S R L I  
UniRef90\_D2PYE0 Y G S D A P P P S Y D D I D R T A Y L L M L G A N P L A S N G S M M T A P G F  
UniRef90\_MODEZ6 G S D A P P P S Y D D I D R T A Y L L M L G A N P L A S N G S M M T A P G F  
UniRef90\_A0A013WSE0 F G N E W K I P I P D L D H T D L F V I F G G N P A A S K G S I F S H R D V M G  
UniRef90\_W4A3H2 Y G A S M A H P I P D L D H T D Y F L C L G G N P L V S H M T L M H I L S N P M A  
UniRef90\_UPI00036B0242 F G H Q G L F P V P D I D R T D L F I C V G G N P A A S N G S L M T A A G V  
UniRef90\_B2JLN7 V P S G Y G G L E D C L K E A E M I V F W S C D P E S T N G A Y A G F E G T P R  
UniRef90\_E1HV40 T G V Q F A S H F S Q I A H S D L V V F F G L N L S E T R M S G G G Q V  
UniRef90\_D6S7Y0 F G L S A P N L V C D L Q N T E M L C V W G A N P K T D S P P F F Y N N  
UniRef90\_UPI00046E9CC3 V G V Y R G A D P R E M A K S D L V V I W G T N A V H T Q I N V M T H A T  
UniRef90\_K9HLL6 G Y G H Q L Q I P I G D I D H T D Y F M I I G G N P L A S N G S I M T V P H I  
UniRef90\_Q15TN4 F G N Q G L F P V P D I D R C D L F V C I G G N P L A S N G S L M S A G G V  
UniRef90\_Q2S7U6 G S N D G N S T T D L E N S K L V V M F G N N P A E T R M S G G G I T  
UniRef90\_I6EA50 G T M T N D L V F E A T D N T D V F L I G T N T S E C H P I I A M Q  
UniRef90\_M5IQ92 Y G S P L S V P I P D L T R T D L L V L M G A N P F V S H G S F L T A P R I  
UniRef90\_K5BG34 F G D S R S H S L E D M L N S K N I F V W G K N P A N T P Q V S H M T L I H I S D P M A  
UniRef90\_UPI00041B9BEB Y G A S M A H P I P D L L H T H F L C L G S N P V S H M T L I H I S D P M A  
UniRef90\_M2X826 Y G S P L A L P V P D L L R T D L L V V I G A N P V V S H G S V L T V P R I  
UniRef90\_G8RQH5 T H L Y G N H T R G E F E H A E V A V F V G K N P W M S Q S F P R A R V V L N E  
UniRef90\_A4TAJ3 F G H Q L M I P I P D I A D H T N Y F L T I G G N P F A S N G S L M T V P D V  
UniRef90\_X0RNZ8 F G H P A L L P V P D I D R T D L W L I I G G N P L A S N G S L M T A P D V A N  
UniRef90\_H2CEY9 G G Q S M I M G F A W S T N E I T D S V N S N M A I F W G N V L E T S M T D  
UniRef90\_UPI000367959D G S Y D Y C Y D D L E H A D V F V L W G A N M A E M H P I L L W S R L T D  
UniRef90\_L0FAB1 L G H P M L M P V P D V A R T D L M L I L G G N P V V S N G S M M T A P G F G K A  
UniRef90\_G2FFF3 G F G A M T N T I N D Y R N F D L L I L L G Q N P A E S H P I A  
UniRef90\_Q0A5X1 G V I G K G T V T L E D F D L A D A I F C I G H N P G T N H P R M R G V P I V V A  
UniRef90\_A3XFM6 T G K I A G V D P R E M A L S D L V I W G T N P V N T Q V N V M  
UniRef90\_D2RUQ8 Y G D A V A I P V P D L D R T D H L L L L G A N P L E S N G S L C T A P D F P G  
UniRef90\_T0J1J9 F G D A L A I P V P D L D R T D H L L M L G A N P L D S N G S L C T A P D F P G  
UniRef90\_M4Z572 T N P L P E V R Q S D C L I L A G A N L A E C Q P T L M P Y F T  
UniRef90\_Q828S2 G E D V V P V N Y S D L D K A E L I V I C A N T A W T H P V I F R R I Q Q A  
UniRef90\_S3ZHB8 P F P V T D L D T S G A I L L L G S N V A E T M P P F V G H L  
UniRef90\_UPI000475D275 G V I G K G T V R L Q D F E L A D A I F V F G Q N P G T N H P R M  
UniRef90\_U0G0S1 T G R L A G P D P R E M D V A D C V V I W G T N A A S T Q V N V M  
UniRef90\_K1E139 F G H M S Q I P I P D I D H T Q H F M I I G G N P L A S N G S L M T V P N L H L  
UniRef90\_V3T0H2 Y G A V P L M R P E H V A H A C L I I V W G V N V T V S Q  
UniRef90\_UPI00035DFE55 G V I G K G T V T F D D L E E A D A I F V I G Q N P G T N H P R M L  
UniRef90\_F2G722 F G H Q L M F P V P D I D R T D F F L I I G A N P T T E A H P I T I G N K  
UniRef90\_W4LB02 F G D P L A I P V P D L D R T D Y L L M L G A N P M E S N G S L C T A P D F P G  
UniRef90\_I4KVC1 G S D A P P C T Y D D I D G A E T H L V W G A N P A V A H P V M F R W I T A  
UniRef90\_A8SN47 Y G S I L M A P V S D I D N C D Y F L L V G T N P A V S A W N W L E T V P G G  
UniRef90\_A8ZZE8 Y G S A L L A P V S D V D N C D Y F L L V G A N P A V S A W N W L E S V P G G  
UniRef90\_H6R1L4 V D R G L P F P L E A L D T A G T I L M L G S N V A E T M P P F V Q H L  
UniRef90\_V4GRY7 L V R D A V N D R F D L Q K S E L I V G F G L N P A W S A M G N A  
UniRef90\_A4T8R6 F G S P M L F P I P D I L R T D F L L T F G A N P M V S H G S I I T A P P T V  
UniRef90\_K0UWC8 I E D A E V I F N M G Y N A A T S H P L  
UniRef90\_B8HFG4 T E G Y W N Y R D F D V L N S E Y I L W G A D P L A S N R Q I S Y Y L G V W P  
UniRef90\_R4KBC0 S Y D Y R N T N Y L L I M G A S F L E A F R P Y N N V M  
UniRef90\_G4HV67 G V I G K G S V L L E D L H Q A D L I I V A G Q N P G T N H P R M L S A  
UniRef90\_E2ZAB8 N S Y D Y R N T N Y I L N F G A G F L E A F R P Y N Y L M  
UniRef90\_V4Q7U6 G V I G K G T V S L E D L E H A E A I F V F G Q N P G T N H P R M L S S  
UniRef90\_B2A6V7 G V I G K G T V T F A D L H Q A D A I F V L G Q N P G T N H P R M L S S  
UniRef90\_W7QOX4 G S P G M T N T L S D L T E A D L F L V V G A N P A A Q Q P I A F N S Y L R P  
UniRef90\_Q0AC66 G I G K G T V S L E D F D H C E L I L S I G H N P G T N H P R M M G  
UniRef90\_UPI00036EC001 G M W N A P I P D L D R T D H L M L G A N P S A S Q G S M L S A P D I  
UniRef90\_E7QZ07 L L W G H N P A R T W L A Q A S R I G A A R Q R G A K V V V D P Q R E G S G Q  
UniRef90\_A0KD89 G R M F G A N V H G E V H D A Q A V V I G K N P W Q S N G Y Q R A R  
UniRef90\_UPI0003796956 F G D P L A I P V P D L D R T G Y L L M L G A N P L V S N G S L M T A A D V R G  
UniRef90\_X7S163 G G F M G L S G R T D L D N A D F L M L V G V N P V V S H G H A I S M P N P T G  
UniRef90\_Y1X1A8 S E L Y G S H T C G D Y E K S E V A V F V G K N P W Q S H G V A H A R T V L R E  
UniRef90\_UPI00037CFFA2 G Y G D A G A I P V P D L D R T D H L L I G A N P L E S N G S L C T A P D F P G  
UniRef90\_V1P9Y0 R M G W N A P S H M W S D S D V S M V I G N T L I S H S V P G G V P S F S P  
UniRef90\_L8P775 F G S P V A F T V P D L D R T D Y L V I I G A N P L V S N G S V A T A A D F G G  
UniRef90\_B7RT98 G P F P L T D L D D A A T V L L G S N V A D T M P P F I H Q  
UniRef90\_I4BQ70 S G A M T N P I E D I T K N P D V I M L V G S N P E E A H P V V V  
UniRef90\_G8TXX7 T G K L A G P D P R E M A V S D Q I V I W G T N A V A T Q V N V M  
UniRef90\_UPI000255D0C6 G V I G K G T V T L D D F E H A D A I F V F G Q N P G T N H P R M L D T L R S A A  
UniRef90\_W1UL05 G I G K G T V T L D D F E H A D T L I F G Q N P A T N H P R M L G  
UniRef90\_B9QX58 G V I G K G S V L L E D L W Q A D L I V A G Q N P G T N H P R M L S A L E K A K  
UniRef90\_E3BIY8 G P A M T N S L D D L A T A D L V L V G A N P A T Q Q V A F N G A  
UniRef90\_E8YI25 G I G K A S V T L D D V Y H A E L I V L Q G Q N P G T N H P R M L T A L E K A K  
UniRef90\_UPI000300FB84 G V I G K G T V V F D D L E K A D A I F V I G Q N P G T N H P R M L  
UniRef90\_V4XXE8 G K L Y G G H T K G D F E D A E V V F V G K N P W Q S H P R A R P T L R E  
UniRef90\_A0A059MJX0 G I G K G T V T I E D F E L A D A I F L F G Q N P G T N H P R M L E T L A H  
UniRef90\_W5IM17 Y G H G L L L P I P D I D H T D F M L I L G G N P L A S N G S L M T V P D V  
UniRef90\_I0RLC0 G I G K A S V T M D D V Y Q A K L I V L Q G Q N P G T N H P R M L E K A K Q N G  
UniRef90\_R9PH07 G I G K G T V S L D D F D K T E L V I S I G H N P G T N H P R M M G T L H E L A  
UniRef90\_I4MZL8 F G H Q L L M P V P D I D R T D L F V C I G A N P A V S N G S I M T A P N V R S  
UniRef90\_Q0SC94 F G H M L R I P V P D V N R T Q Y M L I I G G N P L A S N G S I M T A P N M R Q  
UniRef90\_G2S7E1 G Y G H Q L L M P V P D I D R T D L F V C I G A N P A V S N G S I M T A P N V R S  
UniRef90\_H5X0B4 F G H M L R I P V P D V N R T Q Y M L I I G G N P L A S N G S I M T A P N M R Q  
UniRef90\_S4YR71 G Y G H Q L L M P V P D I D R T D L F V C I G A N P A V S N G S I M T A P N V R S  
UniRef90\_V6PXU3 G V I G K G S V T L D D L H R A D L I V V S G Q N P G T N H P R M R D G A K L L A  
UniRef90\_I0H1U2 Y G H Q L L M P V P D L D R T G F L L I L G A N P L A S N G S T M T S P A V  
UniRef90\_H8Z3R4 S N T A W C H P V L Y Q  
UniRef90\_K2FKU9

UniRef90\_UPI0004716213 R Q A R P E M K V V V I D P 210 220 230 240  
UniRef90\_A7BUA3 D R R L T A P H V Q V A V L S T F H N R R T A T C D I A D L H L A L A P G S D  
UniRef90\_D2PYE0 G R R L K E V R R R G G D V V V I D P R R R T E T A A V A D E H H F V R D P P G T D  
UniRef90\_MODEZ6 R R G G R L V V V V D P R R T E T K S V A L A D E H V A L R D P P G G D  
UniRef90\_A0A013WSE0 A M R D L R A R G G R V I V I D P V R T Q S T A R S A D D Q W I G L K P P G S D  
UniRef90\_W4A3H2 K I K A V K Q R G G T V I F I D P R R R T E T S S G P D T G D V L L I K P P D S D  
UniRef90\_UPI00036B0242 D K R L K A V R S R G G R V I T I D P R R R T E T A S L A D E H V I L I K P P G T D  
UniRef90\_B2JLN7 R M W A K E L E G E F V H I D P H C N P T A Q L L G R W I P V R P P Q T D  
UniRef90\_E1HV40 E E L R R A L E S G A R V I I D P R Y N S D S V V T E Y H A E W L P I R P T T D  
UniRef90\_D6S7Y0 M V K R K N E S G M K I I A V D H Y N S D I I E Y A A D Y K Y I V N S G T D  
UniRef90\_UPI00046E9CC3 R A R K E R G A K I V V I D P Y R N A T A I A A D H H L M L K P G T D  
UniRef90\_K9HLL6 D R R L S K P D S E I L V M S T F H Q R R S T D L S D S D A I L I F R P G T D  
UniRef90\_Q15TN4 K R R L K A I Q R R G G K V V V I D P K K S E T A D I S C D H H F I R P P G S D  
UniRef90\_Q2S7U6 E R R L K A I R R G G K V I T I D P R K A E T A K V A D E H I F I R P P G T D  
UniRef90\_I6EA50 Y L L E K A R E K S N A K M I V I D P R Y T D T A A G R E D E W L P I R P G T D  
UniRef90\_M5IQ92 L M Q R G L Q R G A K M I V V D P R R T D M A K K A D I H L Q I P I G A N I  
UniRef90\_K5BG34 R D R L T D I V K R G G R V V V D P R R T E T A A A F E W L G I T A D T D  
UniRef90\_UPI00041B9BEB M Q M I K A K A K D N G A K I V I D P R Y T N T A K L S D M Y I K I K P G G D  
UniRef90\_M2X826 K L R A I K R R G G T I R F V N D P R R I E S S S P E T G D V L Q I K P P D T D  
UniRef90\_G8RQH5 K D R M H D I I K R G G R L V V D P R K T E T A A Q F E W L G I V P D G D  
UniRef90\_A4TAJ3 I A R D P G R S M I V I D P V I T D T A R M A D I H L R V Q P P G S D  
UniRef90\_X0RNZ8 V K Q A A R N G T K L I V A N D P R E I E L V R M D A D L W L Q Q N L G S D  
UniRef90\_H2CEY9 K K R L K A I Q E R G G R Y V V I D P R R T E T A E H A S E H V F I R P P G T D  
UniRef90\_UPI000367959D R L L K A I Q K R G G N V I V I D P R R T E T A L R A D A H H F I R P P G T D  
UniRef90\_LOFAB1 S A F F F D A K E S G T K M V C I D P V Y S T T A A K C N Q W I S L R P P G T D  
UniRef90\_G2FFF3 T R L T K P G C E V H V L S T Y K H R C F E L A D N G M V F T P Q T D  
UniRef90\_Q0A5X1 N M Q M W G R M R S K G T R I T M V D V R R N S V T A A A A D R K L I V S P P G T D  
UniRef90\_A3XFM6 R M D E I K A R G G R V V V I D P R R T E T A A R A G E H L F I R Q P P E T D  
UniRef90\_D2RUQ8 M Q H I L E G Q A R G G T I V S I D P R Y T K T S A H A D Y F H R L R P P G T D  
UniRef90\_T0J1J9 N P M R E R G L E R F K S P Q H P T E M L S P N A T P L A S A Y H Q V R I G G D  
UniRef90\_M4Z572 T H A A R A R K E R G A K I A A V D V Y D N E T M K Q A D I K I L R P P G T D  
UniRef90\_Q828S2 K L K A L K A R G G T L T V V D P R R T R T A K L A D R H V A I R P P G T D  
UniRef90\_S3ZHB8 R L K A L R A R G G T L T V V D P R R T R T A K L A D R H V A I R P P G T D  
UniRef90\_UPI000475D275 D A K R N G A Y I V I V D P R N T L T A E L A D L H L K V K P P G M D  
UniRef90\_U0G0S1 R E K N P K L K L V V I D P R K T V T A Q Q A D L H L S I P N D A D  
UniRef90\_K1E139 A G A R A A G G L V V V D P R R S A T A D L T D D V H L Q P V I P G T D  
UniRef90\_V3TOH2 L H S L R H A A D R G A H I V A F N T L R E R G L E R F A N P Q N P L E L L T P  
UniRef90\_UPI00035DFE55 T H A I T A R K K R G A T I V A V D V Y E T E T M R Q A D L K L L R P P G T D  
UniRef90\_F2G722 K K R L K A I Q K R G G K V V V I D P K R S E T A D L S C E H H F I R P P G S D  
UniRef90\_W4LB02 M H I R T G A K Q G A K L I V V D P R R T Q V A R H A D L H V A L K P P G T D  
UniRef90\_I4KVC1 E P L R E A V K R G A Q V I C F N P L K E R G L E R F Q H P Q H P L E M L T N  
UniRef90\_A8SN47 M Q Q A H R Q Q K K L I V V D P R K T E T A R E A D L H L S L K S G T D  
UniRef90\_A8ZXE8 S R R I K G I Q K R Q G K V V V D P V L T R T A S L A D Q H L F I R P P G T D  
UniRef90\_H6R1L4 R L K A L R A R G G R L V V V D P R R T R T A D L A D E H L F V R P P G S D  
UniRef90\_V4GRY7 E S A R D D D S R L V V V D P V G T K T A G V A D D H V A L D L G T D  
UniRef90\_A4T8R6 W R R A L A R A R G A T I V V V D P V R T E S A A K A D V H V A V R P P G Q D  
UniRef90\_K0UWC8 W H R A L A R R R Q G A T I V V V D P V R T E S A E K A D V H L P V R P P G Q D  
UniRef90\_B8HFG4 K G A R D A G G L I V V D P R R S A T A A F T A D G H L Q P L P P G T D  
UniRef90\_R4KBC0 T H F Y L E M K K R G C K F V I I D P V Y T D T A A T L E A E W L P I R P P G T D  
UniRef90\_G4HV67 G D R L R A I T A R G G R V I V V D P A A T K T A A S F E H Q P I R P P T T D  
UniRef90\_E2ZAB8 A R R I V R A K K G A K I I C V D P R K T E T G R F A D I F L P I K G G T N  
UniRef90\_V4Q7U6 L R E A S K R G A P I V V F N P L R E R A L E R F A A P Q S P V E M A T L  
UniRef90\_B2A6V7 D V L D K A K V A V I E P R L S A S A T K A H E W L P V K P A E D  
UniRef90\_W7QOX4 Q M W G H M R S K S P K T R V T C V D V R M N P T M A A A D R A L Y L K P P G T D  
UniRef90\_S3ZQ07 L E K A K N G A K I T V N D P L P E A G L E R F K N Q T P Q G M L K G  
UniRef90\_Q0AC66 Q V W G H M R T K S P K T R V T T I D V R M N P T M A A S D R A L M I K P G T D  
UniRef90\_F4AM94 L Q D A K R R G A K I V A I N P L D E T G L K R F K N Q E P V K I N G D  
UniRef90\_UPI00036EC001 E P L R E A V A R G A R V C V N P L R E R G L E R F Q H P Q H A L E M L G N  
UniRef90\_E7QZ07 A I N D G A T L I H V E P D A N E T T R L A D A H V A P T P G T D  
UniRef90\_A0KD89 T R L H E A R R N V P I V V E D P L R E R A L E R F A D P Q D M I E M A S F  
UniRef90\_A4TDD7 M G R L A L R A R G G T I V V V D P R R T P T A R R A S E W V P V H P G T D  
UniRef90\_UPI00047A7D42 Q A D L W L R V R P G R H L L R T Q C F D R D F V A R W T N G P C L V D Q Q T G  
UniRef90\_X5MNB2 V M I R Q I A K D E N R S L I V I D P R R S E S A E F A D Y H L A V K P P G T D  
UniRef90\_UPI0003796956 R L R G I R A R G G K L V V V D P K R S R T A A Q A D E H H A L R P P G R D  
UniRef90\_X7S163 T V R E I A R R G Q V V V I D P R R T E T A R L A T A H L A P R P S T D  
UniRef90\_Y1X1A8 R M K R A Q K L F G Q K L H V F D I R K H E M A E R A D R F Y Q K P P G T D  
UniRef90\_UPI00037CFFA2 I S R D P N R T M I V I D P R R S E T A A I A D I H L Q V K P P G T D  
UniRef90\_V1P9Y0 Y Y V E Q A R E R S N A R M I V I D P R Y N D T A A G R E D E W L P I R P P G T D  
UniRef90\_L8P775 R L K A L K A R G G T L T V I D P R R T E T A G L A D R H I A V R P P G T D  
UniRef90\_B7RT98 A N A L R E G R K R G L K L I V I D P R K S E V A A R A D L H L Q V R P P G Q D  
UniRef90\_I4BQ70 K L R R L R R R G G R L V V I D P A R T R T A E L A D R H L A P R P G T D  
UniRef90\_G8TXX7 V P L L D Q A V Q N G A E I I V V D P L K T A A E E R Y G Y H V A I R P P G T D  
UniRef90\_UPI000255D0C6 V Q H L E G A R E K G G L I V V D P R R S N T A E G E A G F H V A P S P P G G D  
UniRef90\_W1UL05 G M Q I R Q A V K R G C K L I V V D P R D I D L A K K A D I H L K L R P P G T N  
UniRef90\_B9QX58 T H A L A R K A R G A K I V I D V Y K T E T M K Q A D I L G L L K P P G T D  
UniRef90\_E3BIY8 K R G A K L T F N N T N P Q A I N E M L T G G C T E L T H H Y F T P K L G G D  
UniRef90\_E8YI25 E L R E C A K R G A T I V S I N P L K E R G L E R F A S P Q H P V E M L T D  
UniRef90\_UPI000300FB84 S A G A K L M T V N P L P E A G M E R F K N P T A R G L A D H F L Q I R L G G D  
UniRef90\_V4XXE8 V R T A A H D G A T L V H V D P R A N E T T R T A D V H L A P R P G T D  
UniRef90\_A0A059MJX0 R N G A T I L S I N P L R E A G L V I N F R N P Q T P R G S D V H L A P I A L N G D  
UniRef90\_W5IM17 E P L R E A V H R G A Q V I C I N P L K R E R G L E R F Q H P Q H P F E M G G D  
UniRef90\_I0RLC0 I A K D P A R T M I V L D P R R S E T A E M A D I H L Q V R P P G T D  
UniRef90\_R9PH07 A T Q R G A K V V A F N N L K E R G L E R F A N P Q K P V E P T T S  
UniRef90\_I4MZL8 E K R L K A I Q R R G G R V V V D P R R T E T A A M A D Q H L F I R P P G G D  
UniRef90\_Q0SC94 A K I L S I N P L R E A G L V V V K N P Q T P R G M V G S D M H L P I A L N G D  
UniRef90\_G2S7E1 R R N V P R A L E R F A D P Q S V I E M A T Y S S T D I A S T Y F Q V K A G G D  
UniRef90\_H5X0B4 R L K R V R V V V I D P R R T E T A D L A D E H V F I R P P G T D  
UniRef90\_S4YR71 K L K D I I K A R G G K V I V I D P R R T E T A D I A S E H H F I R P A T D  
UniRef90\_V6PXU3 R R L S N Q N V T V A V L S T Y Q H R S F E L A D N G I I F T P Q S D  
UniRef90\_I0H1U2 I N P L P E A G L R R F D N P Q R V R G M A G H G T V L A D R L L R I R S N G D  
UniRef90\_H8Z3R4 G Q R L R A I Q R G G R V V V D P R R T R T A E L A D Q H L F I R P S R D  
UniRef90\_K2FKU9 R I M K A K E E R D L F V V V I D P R F T A T C E A A D L H L P I L P G Q D

UniRef90\_UPI0004716213  
UniRef90\_A7BUA3  
UniRef90\_D2PYE0  
UniRef90\_MODEZ6  
UniRef90\_A0A013WSE0  
UniRef90\_W4A3H2  
UniRef90\_UPI00036B0242  
UniRef90\_B2JLN7  
UniRef90\_E1HV40  
UniRef90\_D6S7Y0  
UniRef90\_UPI00046E9CC3  
UniRef90\_K9HLL6  
UniRef90\_Q15TN4  
UniRef90\_Q2S7U6  
UniRef90\_I6EA50  
UniRef90\_M5IQ92  
UniRef90\_K5BG34  
UniRef90\_UPI00041B9BEB  
UniRef90\_D2X826  
UniRef90\_G8RQH5  
UniRef90\_A4TAJ3  
UniRef90\_X0RNZ8  
UniRef90\_H2CEY9  
UniRef90\_UPI000367959D  
UniRef90\_L0FAB1  
UniRef90\_G2FFF3  
UniRef90\_Q0A5X1  
UniRef90\_A3XFM6  
UniRef90\_D2RUQ8  
UniRef90\_T0J1J9  
UniRef90\_M4Z572  
UniRef90\_Q828S2  
UniRef90\_S3ZHB8  
UniRef90\_UPI000475D275  
UniRef90\_U0G0S1  
UniRef90\_K1E139  
UniRef90\_V3T0H2  
UniRef90\_UPI00035DFE55  
UniRef90\_F2G722  
UniRef90\_W4LB02  
UniRef90\_I4KVC1  
UniRef90\_A8SN47  
UniRef90\_A8ZXE8  
UniRef90\_H6R1L4  
UniRef90\_V4GRY7  
UniRef90\_A4T8R6  
UniRef90\_K0UWC8  
UniRef90\_B8HFG4  
UniRef90\_R4KBC0  
UniRef90\_G4HV67  
UniRef90\_E2ZAB8  
UniRef90\_V4Q7U6  
UniRef90\_B2A6V7  
UniRef90\_W7QOX4  
UniRef90\_S3ZQ07  
UniRef90\_Q0AC66  
UniRef90\_F4AM94  
UniRef90\_UPI00036EC001  
UniRef90\_E7QZ07  
UniRef90\_A0KD89  
UniRef90\_A4TDD7  
UniRef90\_UPI00047A7D42  
UniRef90\_X5MNB2  
UniRef90\_UPI0003796956  
UniRef90\_X7S163  
UniRef90\_Y1X1A8  
UniRef90\_UPI00037CFFA2  
UniRef90\_V1P9Y0  
UniRef90\_L8P775  
UniRef90\_B7RT98  
UniRef90\_I4BQ70  
UniRef90\_G8TXX7  
UniRef90\_UPI000255D0C6  
UniRef90\_W1UL05  
UniRef90\_B9QX58  
UniRef90\_E3BIY8  
UniRef90\_E8YI25  
UniRef90\_UPI000300FB84  
UniRef90\_V4XXE8  
UniRef90\_A0A059MJX0  
UniRef90\_W5IM17  
UniRef90\_I0RLC0  
UniRef90\_R9PH07  
UniRef90\_I4MZL8  
UniRef90\_Q0SC94  
UniRef90\_G2S7E1  
UniRef90\_H5X0B4  
UniRef90\_S4YR71  
UniRef90\_V6PXU3  
UniRef90\_I0H1U2  
UniRef90\_H8Z3R4  
UniRef90\_K2FKU9

250 260 270 280  
A G L F V G L L D V I Q G T D A W P V S R V A A F C G L T P Q  
L A I L N Y I A N Y I I T E T G N F N A E F V A N Q H V N G G S V E A T F E E Y K A  
A A F L L A L T I R Q V I A D T G N F N A E P A S D N V V D G L D Q V T A A A V L A E W T  
L A L A Q A V L R Q V I A D T D R V R D E A F V A S D N V V D G L D Q V T L R R S L P T V E  
A A F M L G I A H V L F A R D A V R L R H L D G L V D G L E T L R E L V T G F S  
F Y F L L A A L H E I V F E E N L G Y D R T A V E E K H A R N I D G L D F L R A Y P  
V L M L L A M L H T L F E E N L V H L G H L E K H L D D I E L L Q L A S D R A Y A  
A A L A T A I M Y V W L K E G L Y D K D Y V A N R T T G F D E W R A Y L T G E T  
A A L V I A I A H T L I K E N L I D E E R V N T Y C V G Y D Y K D Y V L G N G D  
I V L I L G M L N Y L K D K L D Q D F I E E K Y T Y G Y D E F K E Y F T Q G F D  
G A L A L G I M H L L F R D G M A D R E Y L E K Y T R D F L E F E E H L Q T K T  
L A I A N Y I A N H I I Q S G N V N E E W M Q K H C F R R G N T D I G Y G L R  
V L L M L A M L H T L F A K G L V D A G E L L E H A P D L L Q V E A Y V E S Y S  
V L L L L A T I H T L F D E D L I N L G H L S D I I D D V E L L R L A G E A Y P  
A A L V A G I A W V L I N E N L V D D T P F L E D K Y C V G Y H Y K A Y L L G E G D  
K T L N T M M N V I A E N N L Q D T E F I I D E K Y S E G F E Y L K E A V K D F T  
A Y F L L S L L Q V M F A E N L V D R H L V E A Q S T G L D W L R E Q A E D F A  
S A L A L A M G K L I T E F K K L Y D M N Y I N S Y R L L G F N K Y K E Y V R S L D  
F Y F L A A V L H E I V F R I G F D R A A V E R R A R R V D E L L K E Y V R H Y P  
A Y L L S L L N V M F G D N L V D R A R L A R Q A D G G V W L E Q L A R P F G  
A W C L A A L A G V I V Q E D L C D D A F A A A H V N G V D A V R E V L R E V P  
V A L L M A M G M K V I V D E D L H D K A F I E E R C E N F D A F R D S L N H F N  
A F L L L A F V N T L F Q K N L I R K T G L Y T E N D L S T L K T L J A A E F A L  
V Y L L L A M A Q V L F A E N L V R L G R L A S I I D G L D R L R D A V A D F T  
S A L L F G M I H L I L T E N N W Y D K Q Y V R K N T S S P F L I R A D N K T Y T  
L A I A N Y I A N Y I I Q N K A Y N K D F I G K H V N G K F N K V S F E E Y A K  
G A I A L A I A H V I L T E G L W D R P F V G D F T R E N W V K D L P A W W N T  
A F L L L A L I H E V F A Q G L E K L G V L A E I T D G V E T L R E A V R  
V A L V F G L L N Y V R E Q D G L D D T F L G D R V M G W P D V E A E L D Q Y D  
M A M L K G I M K L V Y E A D A L D H A F L A E H T Q G I E A L K A D L E A T R S  
G A F A C G M M H V L F R D G Y A D R G Y M A K Y T D S P D E L E A H L K T R T  
A L L L A A M A Y V L F E E R L V D L G E L A P H V Q G V D E L A D A L R D F T T  
A L L L A A M A Q V L F A D G L V A L G G L A E K R T V T G V G Q V A D A V R D F T  
A A L A N G L K V I F I D G G Y A D E L F L E K R T N G F E V K A H I D T L D  
I A L F D G L I R H C I D T G Y L D T E F I E R N T S D F D Q L A V K L K S S K  
L V V L Q A L L H V V L A E S L D D E A Y L A E R T S G L D N V A R S V A A W W  
M A A V R G M A K A L L E T G L F D Q V F I L D Q H T D G V D A W L T M V D A T R  
A A L A C A V M H V L F R D G H A D R A Y M A R Y A D C P D E L E A H L A E R S  
V L L L A M L H V L F E K Q L Y N V E A L P Y A E D I M E V E H Y V R N F S  
G V L A L A L A E L E R I N G L D H E F I A D H V L G A E A Y L E Q A R R S R S  
M A A F R G I A K F L L K W E R E D R A F I A Q H T S G L E H Y L A Q V D A T S  
A A L T D G I M N I I T E G L W D K E Y V E N K V J E R F E D V K E L V S K Y T  
V Y F L A D I M N T V F E E G L D R P G R L V G D F S A D G I E A V K T A V Q N F T  
A Y L L F G I V H T L F A E N L V D R L R T P V H G L D E V R A A A D F A  
L A L A R A V L A R V L E R G E V D R E F V E S A T T G F E E V A D S L P S V A  
W A L L A M V A V I L G E G L E H R G D C A D L A V G T D R L R T L V A E A D  
W A L L A M V K V I L D A G L E H R G D C A D L A V G T D R L R T L V A E A D  
L T L L G L S H V V I H E N D L I D W D F V R N R Y T Y G F D A E H M Y L L S T Y  
M T M Q L A L A Y I M L K E D L I D W D F V R N R Y T Y G F D A E H M Y L L S T Y  
A W L L A A M I N V L F E V I G L V D R T A V A R Q A N G L D E F E S  
M L F L C A M A H V I V T E D L V D H E F I E A H T V G F D E Y A R E I S  
T S T P I A S D Y L Q L K D G V L D R A F L E H T T G P E T L I N D  
G A L A V A M A H V I L T Q G L W N K E F V V G D F H D G E N R F I P G K T V D E  
G A F A L A V A H V I L T E G L W D K E F V R E D S F E E N W V H G L T K W W N Q  
T A L T D L F L Q I L E T D G A V D E A F V R E H T H G Y E F V A A R A A D  
G A L A L A I A H V I L T E G L W D K E F V V G D F E D G R N H F R T G E T I P  
V A L L K G L C K S L I E R D S H D H E F I E H Y C H G F D A F K S D I E Q T T  
R S L L R G M A K F L L Q W E R E D H D F I A R H T E G L D A Y L A A V A S E  
A L F V N A V T A E L L D R E L Q D E A F I A E R T T N F E S F A E S L A S L S  
G S T R I A S T Y Q V D A E G G L D R D F I A Q H T N G F D A F S A D L E A T S  
A L L L F A I L H T L A E R G W L R P H L Q D L V A G L D D V V G L A A R F S  
A L L R A R D L W P V A Q E P G A D P S F G A W P V Q G H D G R R Y Q M L A A A  
S W C L S A M I A H I T Q S D L V P E D W H A E H T S G L E A V R K R F A D I D  
A L L L F A M I G V L F A E N R V S L G E L A G Q V N G L T E L R E L K A P F T  
H A L L A Y L V R E I L R D G M K S D V P V Q G I D E L A R A V I E P F T  
L A W L S A V T K Y I V D H D L H D K A F I D E W V D D F D E Y Y K S L E T F T  
A W C L T A I T G L I Q E N L I N H A W L A E H W A T G V D E V D S A L R F I D  
A A L A A L A W V L I T E D M V D K P F L D K Y C V G Y H Y K A Y I L G D G P  
A L L L A A M A Q V L F E E N L V D L K G L A P V V D G V D E L R A A V G D F T  
A A L L A A I I Q I V I S E N L Y D K E F C E D H T E G L E L D Q A T R Q F T  
A A L L F A V V H V L F D E N L V D L G V L A E H V A G L D K V R A L A G D F A  
D V L A L S L G Q A L T R Q N R H H Q P F I A E R Y T R G F E A Y R R E A E A W P  
L V L L L A V A Q V V L E R G F A E D Y L A E R Y V E G L A A F R R A E M R W P  
V A F A N G I M H I I E E G L Q D M D F I N E R T E G Y E K I K E I V K D Y T  
A A L A C A I M H V L F R D G F A D W D Y L E S K Y T D F P K E L D S H L Q T R T  
M A A V R G I S K A L V A M N K V D T E F I E Q H T Q G F D Q Y I E S V E K T S  
F A L I K G V A K R V I E L D D L D V T F I A E H T V G F E A F A E D L R A E S  
Q A L F R M L C A R V L E E R A V D S A F V R A E R T H G Y E E F A E A R K T D  
A L L L S L L C A V V A E A G L V D R E F V A R T S G F D A F A G S L A D L D  
L A L L L Q A F G S L V I E W D A L D H E F I E R H T H G F E Q W R H H V A G V D  
M A M F R G M A K F I L Q W E R E D H A F I R E H T S G L D D Y L A A V A D A T S  
A W C L A A M L A V I V Q E D L V D H T F L A D H T T G T E P A R A A L A E V P  
H Y F T P G I V K I L L E R H Q F N Q A F I E Q H S Q G L E A Y L I E V E Q S S  
A A L L G M L N T L F S E G L G R A T H L P V D G L E Q V R A A I A G F T  
L A L L Q A F G S L V I E W D A L D Q E F I D Q H T I G F E L W K Q H I T D I D  
A A A L K G I A K H L L Q M G V L D S E F I A E H T Q G F S A F A D D I A Q T S  
A L L L S L V N V I F T E H L V C T G R L T P R L A T G L E I L R V A C R D F T  
V L L L L A M L N E I Y L Q G Y A D K A S L N N R A A L A P E L I E R L A D F F A  
L V I L N Y I A N Y I I Q N N A I N Q D F F S K H V N D A S E P M S F E D Y K A  
L A L W Q A I G H Q L I R R G V A D R E F T G A S T V G F E A W A R H L S E I D  
A L L L A A L Q V I F A R E R L E R L G R L D G A F V N G L D A V R A A V A P F T  
V A L F N G L L Q Y L Q Q N G H A D L D F V T H H T Q G L E A Q A L A S S

UniRef90\_UPI0004716213  
UniRef90\_A7BUA3  
UniRef90\_D2PYE0  
UniRef90\_MODEZ6  
UniRef90\_AOA013WSE0  
UniRef90\_W4EA3H2  
UniRef90\_UPI00036B0242  
UniRef90\_B2JLN7  
UniRef90\_E1HV40  
UniRef90\_D6S7Y0  
UniRef90\_UPI00046E9CC3  
UniRef90\_K9HLL6  
UniRef90\_Q15TN4  
UniRef90\_Q2S7U6  
UniRef90\_I6EA50  
UniRef90\_M5IQ92  
UniRef90\_K5BG34  
UniRef90\_UPI00041B9BEB  
UniRef90\_M2X826  
UniRef90\_G8RQH5  
UniRef90\_A4TAJ3  
UniRef90\_X0RNZ8  
UniRef90\_H2CEY9  
UniRef90\_UPI000367959D  
UniRef90\_L0FAB1  
UniRef90\_G2FFF3  
UniRef90\_QOA5X1  
UniRef90\_A3XFM6  
UniRef90\_D2RUQ8  
UniRef90\_T0J1J9  
UniRef90\_M4Z572  
UniRef90\_Q828S2  
UniRef90\_S3ZHB8  
UniRef90\_UPI000475D275  
UniRef90\_U0G0S1  
UniRef90\_K1E139  
UniRef90\_V3T0H2  
UniRef90\_UPI00035DFE55  
UniRef90\_F2G722  
UniRef90\_W4LB02  
UniRef90\_I4KVC1  
UniRef90\_A8SN47  
UniRef90\_A8ZXE8  
UniRef90\_H6R1L4  
UniRef90\_V4GRY7  
UniRef90\_A4T8R6  
UniRef90\_K0UWC8  
UniRef90\_B8HFG4  
UniRef90\_R4KBC0  
UniRef90\_G4HV67  
UniRef90\_E2ZAB8  
UniRef90\_V4Q7U6  
UniRef90\_B2A6V7  
UniRef90\_W7QOX4  
UniRef90\_S3ZQ07  
UniRef90\_Q0AC66  
UniRef90\_F4AM94  
UniRef90\_UPI00036EC001  
UniRef90\_E7QZ07  
UniRef90\_A0KD89  
UniRef90\_A4TDD7  
UniRef90\_UPI00047A7D42  
UniRef90\_X5MNB2  
UniRef90\_UPI0003796956  
UniRef90\_X7S163  
UniRef90\_Y1X1A8  
UniRef90\_UPI00037CFFA2  
UniRef90\_V1P9Y0  
UniRef90\_L8P775  
UniRef90\_B7RT98  
UniRef90\_I4BQ70  
UniRef90\_G8TXX7  
UniRef90\_UPI000255D0C6  
UniRef90\_W1UL05  
UniRef90\_B9QX58  
UniRef90\_E3BIY8  
UniRef90\_E8YI25  
UniRef90\_UPI000300FB84  
UniRef90\_V4XXE8  
UniRef90\_AOA059MJX0  
UniRef90\_W5IM17  
UniRef90\_I0RLC0  
UniRef90\_R9PH07  
UniRef90\_I4MZL8  
UniRef90\_Q0SC94  
UniRef90\_G2S7E1  
UniRef90\_H5X0B4  
UniRef90\_S4YR71  
UniRef90\_V6PXU3  
UniRef90\_I0H1U2  
UniRef90\_H8Z3R4  
UniRef90\_K2FKU9

290 300 310 320  
F V S E Y T L D Y V H E L S G V P K E E L E A L A Q I Y A S I K V V S Y W T M G  
P E R A A A A T G I L D A A V E I R R L A A E F G T A D R R A A C Y G R V G  
D A A E A A G V S I D A A V E R L A T A F E S R T L V Y W G M G  
P Q W V A H H C G I D A I V I E N L A D E L I R T E R S A I Y G R I G  
V E R V T A A T G I E A D V I R K V A E D F C T A P T A S I Y M A T G  
P E T V A S A T G I P A E R L I R E L A R E L A G T R Q A L L Y G R M G  
D G V P K T P E W Q E Q E T G V P A K D V R A L A R R W G A K K V Y L A V G M T  
D G V E K T P E W A A D I C G I P A I D R I R Q L A R E M A G A R A C I A Q G W G  
L P E K T S E I T G L E V D E V K E L A N L F D N T V A L K S Y T G  
P Q W A S D I T G L T V A E I T E V A H L I G K T P K T F L R L G Y G  
P E R H P L Q M K A A M A R Q A A G S E E I D F E T Y K Q P D R K V M S L W T M G  
P E R V A K R V G I S S E E I E T M V S E F C A A K S A F C Y G R M G  
A D R V A Q A T G V A A E D I R R L A R A L A Q T R Q A V L Y G R M G  
D N T A K T P Q W A S Q I T G T P V D R I L K L A R E I G T K P A Y I C Q G W G  
P E R F E R E T G I K K E L I J E A R M Y A K A G T A A I C Y T M G  
P E V T A G I T G I A P Q T V R T L A R E L V R T P R S A V Y G R I G  
L N L L I N K C G V P A E E I R R V A D E L E E L N K L V N L Y T E K Y S T I L L G Y G  
V D R V A S V V G V P A E E I R R V A D E F C A A P S A S I Y M A T G  
P E V T A V R T G L D P D T V R A L A R D L V H T E R S A A V Y G R V G  
V A E Y A R R C G V D E A L T R S A A R R I A A A G S V A V F E D L G  
L K R T E K I T G V P K D K I R D A A R I Y A T E K P S S L Y A M G  
D R V E K V T G V P A S T I E R L V D E F T Q A K G A V C Y G R V G  
P E R V A G V T G L A A D T I R Q L T R D F A Q E R A A L Y G R V G  
A N G K V K T V L S A Y I E H V K D Y T P E W A S K I T E P E K V S S Y W T M G  
A V S E Y T L E K A S K M S G V P K K N L E R L A K A Y A D P K V S S Y W T M G  
T L K D A T P A W A E G I T G V P A E K I V A T A K E F G S T R S P A I A V F R M G  
P F T A D K A A E M T G I E A Q T I R A L A R D F A T S R S K S A V C Y G R M G  
L E T V A D I T W I D Q E D L E E G D L I V E N S H I Q V E W A M G  
W D W L E T T S G L T R D A I E T M A E V Y M N A E R V I V C Y G M G  
P E W A S Q I S G V P V A E I E A F A K L V G E T K R T F F R L G Y G  
P E A A S P S C D V P A D V I R E L A R E L A A A P T A A V Y G R I G  
P E A V A A A C T G V P A A T I R E L A R E L A A A P T A A V Y G R V G  
L A K L A S I T D V P A E D I Q E A G K R F G K A A S G M I L T A R G  
F T L D Q L S D T L G I D K Q T L L T F Y R W F S E T Q K V V T V F C Q G  
P E R A E Q V C G V P A D D I R A T A R L L A A A S P S R G G A V H V L T G R G  
W P Q I E Q S G L S E T Q I R Y V A A I Y Q R S K R V I C T W A M G  
P K W A S A I T G L S V E D I E A F A R L V G T T P R T F L R L G Y G  
P E K V S E K T G L Q A S Q I T Q L V T D F C E A E A A V C Y G R M G  
L E A S A D I C G L T P A D I R Q M A E L Y K T I S P A V I C P G N G  
W E H I V E Q S G L S L E D I E L A A R M Y R R A K R V I M C W A M G  
P E L V S K I T T V P V E K I Y K A A R M Y A S A E R A G I F Y T L G  
P E K A A G M T G V S A E D I R Q L A R D F C R A D K A V C Y G R M G  
P D V V A R R T G V P A D T I V R L A R E L A E A P T A A V Y A R I G  
S A A E T A G V S V E T V D I L A E A L S D P T L V Y W G M G  
I D D L A D R C D V P R D R I E S V A R D F A T A R A A M V V T R T G  
I D D L A A R C D L P R D Q L V D V A R S F A T A P R A M V V T R T G  
P E R V Q S L T G V P A D L I R E T A R R L A A G A R K G S Y I L T G R G  
D N V P K T P E W A E K I C G V P A D T I R K L A R R I G K N K V T L T W A  
A I S H F T V E T A A A V T G I D A A S I R R L A I D F G T S D T A V A Y R V G  
D P K Y A P E A I E A Q T H L D A E E I R K A A R L F A S S K H T M T L W G M G  
L R D T L W P I L E A A C G L T R A E Q L E H A G A R L Y A K A K S V I V C Y G M G  
E T F E E N Y T H G L V K W L L E L K D R T P E W A E A A P K A L V W M G G G  
E L K D R T P E W A E A V T S I P A R H I R Q T A M E F G S T R P A V A F E R G  
W D E T L T A T G L D R A R I E E A L R M V L A S K R T V V C W A M G  
D A F Q A N W T H G L A E W W N G E H I Y T V A R E F A T T R P A M A I M E R G  
W H A I E Q G S G L T Q A Q I E Q A A D I A C A S K K T I C C W A M G  
L D E C A E R T G V D A E R I R H I A E R F G R A D R A A V I V G T G A  
W D D I E R A S G L S Q A Q L E Q V A I A Y A K S N A T I V T Y G M G  
P E R V E V A T G V P A G T V R R L A A D L A A E P V L Y S R I G  
V D R Y T P D T V A A L A W L D K A D I A R F N A V F E N S P R L S Y H A W T G  
V D A Y A E Y A G I E P A L L K E A A E A V G K A E T A A S Y E D I G  
P E A V A P H T G L D A D V I R R L A L E L A D A E R A A V Y G R I G  
L E H T A K L A D V A E A D L A R L S A G V R A A K C V A V E T G T G  
M A F A E E A T G V P E S E L I K F A E E C A K A E S V V I C W A M G  
V A D H S R R C G V P E D L I R T A A R R I A S A K S V A T Y E D I G  
D G I A K T P E W A A Q I T G I P T D K I I K L A R E I G Q K P A Y I C Q G W G  
P D S V A E A C D V P E D V I R A L A R E L A A A P T A A V Y G R I G  
P E A A A A A T D V P A E Q I Y E A A R I F A A G P K G S A V I T G T G  
P E T V I G P Y C G V D A A E I R A L A R E L A A A P T A A V Y G R I G  
L E R A A E V T G V S L G V L E T L V D R L A T R P L L I R P G F G  
P E Q A Q T V T G V G A D L I R Q L A R R L G H A A A R A R D P V F I L T G R G  
P E K V A K I C H I D A E D L R K A A I M Y A K A D M A P I I Y C L G  
P D W A A A I T G L E V A Q I E E V A R L V G E V K K T F E R L G Y G  
W E E I I E Q S G L C Q K E I E L A A N V F S K S Q R V I L T W A M G  
W D T I V A E S G V P Y E D V L K L A D I Y A K G R A V I S T W G M G  
W D E V L T A T G L A R E E I E R A A E L V L A A E R P V I C W A M G  
V E R G A A V A G V D A R A V R A V G R A V G E G D G V A A V V G T G  
W D V V I T A T G L S R E Q I T E A A T L L R D S R A T V F C W A M G  
W A H L V G Q S G L S L A E I E L A A R M Y R R A E R V I M C W A M G  
I D T Y A G R C G V P L E L I R A A A R R I A S A E S A A V Y E D L G  
W Q H I E K Q S G L S Q A Q L E S V A D I Y Q Q S E R V I I A W A M G  
A Q A M S A R C G V P A A D I R Q L A R D L A A A D K A V C Y G R M G  
W D V V T R T G L S R E Q I T D A A R L L R D S D A T V F C W A M G  
P E R T A A V T G V D P A R V R A L A R E L A A T T P R A V V Y G R V G  
K D Y S A E S V T A I T G I A I D I K R L V T E F C E A K S S V C Y R M G  
F V A E Y T L E K T A E M T G V P K D Q L E Q L A Q L Y A D P K V I S Y W T M G  
P E R A R D A V I E A A T G L P W A E I D E A A D M L A N A K R I V H C W A M G  
P A R V A E R I G I A E V I T A L A R E F A A A Q T A V V Y G R I G  
S T E S S I E S V V Q R T G I T I E K L T L F F Q K F A Q T D K I M S L F S M G



UniRef90\_UPI0004716213 330 340 350 360  
UniRef90\_A7BUA3  
UniRef90\_D2PYE0  
UniRef90\_MODEZ6  
UniRef90\_A0A013WSE0  
UniRef90\_W4A3H2  
UniRef90\_UPI00036B0242  
UniRef90\_B2JLN7  
UniRef90\_E1HV40  
UniRef90\_D6S7Y0  
UniRef90\_UPI00046E9CC3  
UniRef90\_K9HLL6  
UniRef90\_Q15TN4  
UniRef90\_Q2S7U6  
UniRef90\_I6EA50  
UniRef90\_M5IQ92  
UniRef90\_K5BG34  
UniRef90\_UPI00041B9BEB  
UniRef90\_M2X826  
UniRef90\_G8RQH5  
UniRef90\_A4TAJ3  
UniRef90\_X0RNZ8  
UniRef90\_H2CEY9  
UniRef90\_UPI000367959D  
UniRef90\_LOFAB1  
UniRef90\_G2FFF3  
UniRef90\_Q0A5X1  
UniRef90\_A3XFM6  
UniRef90\_D2RUQ8  
UniRef90\_T0J1J9  
UniRef90\_M4Z572  
UniRef90\_Q828S2  
UniRef90\_S3ZHB8  
UniRef90\_UPI000475D275  
UniRef90\_U0G0S1  
UniRef90\_K1E139  
UniRef90\_V3T0H2  
UniRef90\_UPI00035DFE55  
UniRef90\_F2G722  
UniRef90\_W4LB02  
UniRef90\_I4KVC1  
UniRef90\_A8SN47  
UniRef90\_A8ZXE8  
UniRef90\_H6R1L4  
UniRef90\_V4GRY7  
UniRef90\_A4T8R6  
UniRef90\_K0UWC8  
UniRef90\_B8HFG4  
UniRef90\_R4KBC0  
UniRef90\_G4HV67  
UniRef90\_E2ZAB8  
UniRef90\_V4Q7U6  
UniRef90\_B2A6V7  
UniRef90\_W7QOX4  
UniRef90\_S3ZQ07  
UniRef90\_Q0AC66  
UniRef90\_F4AM94  
UniRef90\_UPI00036EC001  
UniRef90\_E7QZ07  
UniRef90\_A0KD89  
UniRef90\_A4TDD7  
UniRef90\_UPI00047A7D42  
UniRef90\_X5MNB2  
UniRef90\_UPI0003796956  
UniRef90\_X7S163  
UniRef90\_Y1X1A8  
UniRef90\_UPI00037CFFA2  
UniRef90\_V1P9Y0  
UniRef90\_L8P775  
UniRef90\_B7RT98  
UniRef90\_I4BQ70  
UniRef90\_G8TXX7  
UniRef90\_UPI000255D0C6  
UniRef90\_W1UL05  
UniRef90\_B9QX58  
UniRef90\_E3BIY8  
UniRef90\_E8YI25  
UniRef90\_UPI000300FB84  
UniRef90\_V4XXE8  
UniRef90\_A0A059MJX0  
UniRef90\_W5IM17  
UniRef90\_I0RLC0  
UniRef90\_R9PH07  
UniRef90\_I4MZL8  
UniRef90\_Q0SC94  
UniRef90\_G2S7E1  
UniRef90\_H5X0B4  
UniRef90\_S4YR71  
UniRef90\_V6PXU3  
UniRef90\_I0H1U2  
UniRef90\_H8Z3R4  
UniRef90\_K2FKU9

UniRef90\_UPI0004716213 M G G R E V G G L A N H M N F E P D D L S R V A R F W G T E R L A Q T P G L M A 370 380 390 400  
UniRef90\_A7BUA3 C G T A R E V G T F S H R L P A D L V V A N E D H R R F A E K I W D I A G H H A  
UniRef90\_D2PYE0 R G I G R G H F G V W T S R V R G L P E F G G E L P A A A M  
UniRef90\_MODEZ6 M G T R V C K G S W P G H R A F D D P E E R T H I A D E W D V P V E R L P A D D P  
UniRef90\_A0A013WSE0 D M L A T L P A D M P V V M G K S R V R G V P A V L G Q F P A S C M  
UniRef90\_W4A3H2 Q N S K R K R E N P F H N S V G E V R T V S G D L P A A M  
UniRef90\_UPI00036B0242 T F T G M A G L T G H F G K Y K S S V R G L P E F G G E L P A A T M  
UniRef90\_B2JLN7 G V P H D L N F Y F P G Y A D G G V S G E L A W T A N A V N N Y Q R M P H I L T  
UniRef90\_E1HV40  
UniRef90\_D6S7Y0 N K P M K R V Q N P P N N A K N I E K I G S K E F P L F D K L I G Q P Q F T K L  
UniRef90\_UPI00046E9CC3 W D M S L I E G H D A L D P K V R M L D Q S R I G P V L T G D P Q D L K  
UniRef90\_K9HLL6 C G T A R E V G T F A H R L P A D M V V T D D V H R A T A E K I W R I P E G L L  
UniRef90\_Q15TN4 T L P H S G R G T M G K Y S S R V R K L P A F A G E Y P V A A L  
UniRef90\_Q2S7U6 L P A I G A M S G H K G H F D R Y R S S V R G L P E F G G E L P A A T L  
UniRef90\_I6EA50  
UniRef90\_M5IQ92 Q G A C D M P N V I P A G A V N S P Y A Q E Q A R K V W H F E L N P V P G F K L  
UniRef90\_K5BG34 G Q R F S A M V M G A S L R R S F R R K R T R I G G F P S V I G A E P A A L L  
UniRef90\_UPI00041B9BEB V L N N D P F N R K F Y T S D I E S F I K E S I Q G S T Y Y K D N I Y I K K P K  
UniRef90\_M2X826 H H S K R R R E D P F D G P L G E M R T V G G D L P A A L  
UniRef90\_G8RQH5 G E R L L G K L G G A M L R A I Y S R R R S R I G G F P S V L G S E P A A V M  
UniRef90\_A4TAJ3 R P G G V I G R T P V T G A P I G G L M P S N V I  
UniRef90\_X0RNZ8 Q G A C D V G A L P N V F T G Y Q V V I R K K F E S E W G T F L P G E T G L T L  
UniRef90\_H2CEY9 D P N S A M G G A R G S F N R Y R S R V R A L P E F S E E L P V S V L  
UniRef90\_UPI000367959D G K R Q L Y A K H N R Y R S R V S G Y P E F M S E L P V S C L A E E L  
UniRef90\_G2FFF3 I G R V G G V G G T Q H G T C W S M D V E F G W E L P P E F K A D L E G  
UniRef90\_Q0A5X1 C G T A R E V G T F T H R L P A D L V V K K D A H C K F A E K I W K L P E G T I  
UniRef90\_A3XF6 P I N P D D Y M D Y A R E M E G K Y P R I D M A R T D A W P M T S N M I Q D I  
UniRef90\_D2RUQ8 Y V I G M T S R K G K S R S Y P E R R S V S Q Q P L Y N G E F P V S V M  
UniRef90\_T0J1J9 Q G A T D L G V D A S I L P G Y Y G V D A P G S W E H W S S V W D Q S P W  
UniRef90\_M4Z572 Q G D R T V G L T E I P T E Q M L E R L D A T Y G L T S P R E H G H N A  
UniRef90\_Q828S2 F D E S I E G H D A I D H S T R F L D Q S Q I G R I L T G D R E A L C  
UniRef90\_S3ZHB8 P R P A G P G K G F G R W R S R A S G H P E A K G E L P I A A L A E E I D T P P  
UniRef90\_UPI000475D275 Q G G R E H G Q K A D Q L P G Y R D R A Y I A G V W G V E P D D L P G K G V S A  
UniRef90\_UOG0S1 W V I G V K L A G W P I S W  
UniRef90\_K1E139 Q G G R E H G Q K A D Q L P G Y R M I A D A A V W G V D A D D L P G P G L P A V  
UniRef90\_V3T0H2 Q G N R T M G I D E K P S T A L L D S L S D H F H F T P P R G H G N T V Q A I  
UniRef90\_UPI00035DFE55 L N S S M V T L P V A A G K G S L G T F T S R V R G L P A F A G E Y P V A C L  
UniRef90\_F2G722 V L G G G L L Q G A S S A F P K T L P R L Q G D A F I D P Q T R T L G N I V T L G  
UniRef90\_W4LB02 Q G D R T M G I N E L A P P E L I N A L E A R F D F K V P R R H G H N T V M A T  
UniRef90\_I4KVC1 Q G A C D M A A L P N Y F P G Y Y V L D D D F E E H W D C K L A N R K M G L R I  
UniRef90\_A8SN47 D F T A R A N E K G Y V G R H S R V S K L P D F A G E F P A S V L  
UniRef90\_A8ZZE8 L G I V R T K A F R L G R W T S R V R E L P E A M G E F P V A T L  
UniRef90\_H6R1L4 M G T R V W P G Q R P F D D P A E R R T V A D A W G V P V D R L P D D P G P G P  
UniRef90\_V4GRY7 R M S G M V K A T P H R N R L S G R E M V A G A H A L S E L  
UniRef90\_A4T8R6 R F E P G Y V D G L R L A G L A G T K P H T S R L R G R P L V A G A H A L S E L  
UniRef90\_K0UWC8 Q G G R E H P G Y R K L T S P A A R A H V A S V W G V P E D L P G P L P A V  
UniRef90\_B8HFG4 N F G K A L V I G W K A I S E G S Y N P S V F P S I N A K P A D W K V V S K  
UniRef90\_R4KBC0 G D A P V D L A G L A A K F G N G G Y A S T K S R I G G I P D V A G H M P W V L  
UniRef90\_G4HV67 Q G T C D M G V L P N V Y P G Y Q K V T D P E V R A K F E K A W T P L T H V I P D  
UniRef90\_E2ZAB8 Q G D R T V G I D E K A P A P L R E G I K R V F G F D P V I A H G H D A  
UniRef90\_V4Q7U6 Y P A P D E Y M D E N A Q E K I N Y Q K I D Q R G Y L E F P A L K E G K P G S G  
UniRef90\_B2A6V7 V N A D D Y L D D Y A R N G A W K D Q P R I D M A R T E R W P M T S H M M Q E T  
UniRef90\_W7QOX4 Q G D R T M G I F E R P A P A F L D A L E K E F G F A P P R H H G L D V R A I  
UniRef90\_S3ZQ07 L P V S A D D Y M D D Y A R E M Q G K H P R I D M A G T E K W P M A G T M M Q E  
UniRef90\_Q0AC66 Q G D R T M G I W E K P D P K F L D A L E K E F H F S P P R E N G V D A  
UniRef90\_F4AM94 Q G D R T V G I N D R P A A L D A L E R R F G F A P P R H H G H N T V E A I  
UniRef90\_UPI00036EC001 Q G A N C R P S T L P G F R P V A D A D A R S A V A E E W G A A P P S R P G R S  
UniRef90\_E7QZ07 Q G N R T V G I T E K P S A E F L K K I E D V C G F T P G A Q H G H D A  
UniRef90\_A0KD89 W S P M F M K P P D Q D G P G W R F G R F H S R V R R V P E V L G P F V S C L  
UniRef90\_A4TDD7 V N T Y G D L L P P G Q R A K A L G L D E L P L G P P G M G W I T S R D F A R A  
UniRef90\_UPI00047A7D42 V G P F F G F D D V G D E D G Y E Q D Y R K S P V T G A R L V S G L V P C N T V  
UniRef90\_X5MNB2 V I A V R S K P F R S G R W R T R V R G L P E V L G E V P V A T M  
UniRef90\_UPI0003796956 E T F G E F L P V T P I E G S F G P G P R S R P E A Q A F I N E W P C  
UniRef90\_X7S163 Q G C S D M G S M P D K I T G Y Q D D I R A K F E K E Y G V K L N P K A G K D N  
UniRef90\_Y1X1A8 G Y W H H  
UniRef90\_UPI00037CFFA2 T F D L G V E M F S P L K N P V K T E I S S F T W T E A I E R G T E M T S T R D  
UniRef90\_V1P9Y0 P R P A G P G H G F A L G R W H S R V S K H P E A K G E L P I S A L A E  
UniRef90\_L8P775 T S P Q P Q W L T E G V A S R I D P D I H E T V V L S P Y G P L K E M P A G L A  
UniRef90\_B7RT98 P R G H R P G R G F A T G R W H S R V S G H P E V L S E L P V A A L  
UniRef90\_I4BQ70 L S Q D R L T R P D L K P G T V R K V N M V I Q L  
UniRef90\_G8TXX7 Q G G R E M G Q K N D Q L P G A R S I L D P A D R A H M A E V W G V D E R P A A  
UniRef90\_UPI000255D0C6  
UniRef90\_W1UL05 L N K E M L E A N S L I D P S V R T L D Q S L I G R I L T G  
UniRef90\_B9QX58 Q G D R T M G I D E K P P Q K L L D A L E K E F S F K P L P P G G I G H N T V Q S I  
UniRef90\_E3BIY8 Q G D R T V G I E E K P T Q A F L D R L G E V Y R F E P P R E H G L D V V N T I  
UniRef90\_E8YI25 Q G D R T M G I F E R P E P A F L D A L E R E F G F A P P R E H G L D V V R A L  
UniRef90\_UPI000300FB84 Q G A V D A G C V P P G H Q P V T D P A A R D R A A E A W G V A P A A P G R P  
UniRef90\_V4XXE8 Q G D R T M G I W E R P P A H F L D A L Q R E F G F D P P R E N G F D T V D S I  
UniRef90\_A0A059MJX0 Q G D R T M G I D E K P T W L L D A L E K R F K A P R G H G D N A V L A I  
UniRef90\_W5IM17 F A A I A G A S A G T S G G A R V R T P V T G A R I S G L V P C N S  
UniRef90\_I0RLC0 Q G D R T M G I N E K P N A A F L K S I E D V F G F A P P S K P G H N V Q A I  
UniRef90\_R9PH07 A S T G G G H F N A W Q S R V S G L P E Y G G E L P V S A L  
UniRef90\_I4MZL8 Q G D R T M G I W E R P P R H F L D A L A K E F D F D P P R E N G Y D T V D S I  
UniRef90\_Q0SC94 Q G N R T V G I T E K P T A A F I A R L K D V F G F D A P A K H G H D A  
UniRef90\_G2S7E1 P L A T V T G N R G S F D S Y R S R V R G L P E F G G E L P V A A L  
UniRef90\_H5X0B4 N N S G P Y L G K R H S R V S K L P D F N G E Y P V V A M  
UniRef90\_S4YR71 C G T A R E V G T F A H R L P A D M W  
UniRef90\_V6PXU3 Q G D R S M G I W E K P P A L L D G L R A E F G F E P P R H H G F D A V D T V  
UniRef90\_I0H1U2 A V D P I G I L R L S K Q G T V G R W H S R V R G L P E I G E L P V A V L  
UniRef90\_H8Z3R4 M G G R E N M L A S H L D L D N P Q H Q Q L V Q D F W Q S P V I A R Q P G L K A  
UniRef90\_K2FKU9

UniRef90\_UPI0004716213 V E L F D A I A R G E V K A V W I M G T N P A V S L P D S H A V C Q A L A N C P 410 420 430 440  
UniRef90\_A7BUA3 V L Q N R K L K D G E T N A Y W V Q N N N L Q S A P N L N E Y P G Y T N P K N  
UniRef90\_D2PYE0 A E E I R T P G D G R I R A M V T I A G N P V L S T P S G R R L D E A L A T L D  
UniRef90\_MODEZ6 G P G P V D V L R S D P T V L W T I A T N P A A G Y P N G E A V R D A L E G T  
UniRef90\_A0A013WSE0 A E E I A T P G P G Q I K G L L T F A A N P A L S A P D S G K L A E A L P L L E  
UniRef90\_W4A3H2 L S E Y I E T R D D P I R A L I V I S G N P L L S V I G G E E R L R A L K D L E  
UniRef90\_UPI00036B0242 A E E M L T D G P E K I R A M V V A G N P V L S S P N G G K L D R E A L E Q L D E  
UniRef90\_B2JLN7 M N P V K Q M V P R Q Q L P D A I L I N G H A A G Y L W D R W A D A Y R H P S L I E  
UniRef90\_E1HV40  
UniRef90\_D6S7Y0 P Q A I L E S D P Y P I K G L I N L G S C M S V N Y P N S Q L Y R K A L K S L D  
UniRef90\_UPI00046E9CC3 D G P P I T A M L I Q N T N P M D V A P E L A K V H A G F A R E D  
UniRef90\_K9HLL6 N E P G Y H A V L Q D R K L K D G E L N C Y W V S T N N N L Q W M G Y R N P D N  
UniRef90\_Q15TN4 S E E I T T P G D G Q I K A M V I G G N P V L T S N G K Q L D M K A F E Q L E  
UniRef90\_Q2S7U6 A E E I L T E G P E Q I K A M V V V A G N P V L S S P N G G R L D E A F S Q L E  
UniRef90\_I6EA50  
UniRef90\_M5IQ92 T Q A P D K M D S G E L K V L Y V Y G E N P V M S D P W T E H F V H A V H H L D  
UniRef90\_K5BG34 A K E I T T P G P R R I R A L F V S A G N P V L S V P N G A E L R A A L G E L E  
UniRef90\_UPI00041B9BEB I K Y D L T K S N V P I R A L I V V S G N L L N Q L P N L N G L R S A I D K I S L D  
UniRef90\_M2X826 L P D F V E N A D D P V I R A L I V V S G N P V L S V G G D D R L R S A I L S L D  
UniRef90\_G8RQH5 A K E I T T A G R G Q V R A L L V S A G N P V L S V P N G T E L R E T A L L E S L E  
UniRef90\_A4TAJ3 P E E I L T D H P D R F R A L I V E S N P A H S V A D S A A V R R A F S E L E  
UniRef90\_X0RNZ8 L E M L D G A H R K E I K A L Y L I G E N P V L S D P D A S A H V R E S L K A L D  
UniRef90\_H2CEY9 A E E I L T P G E G Q V R A L F T T A G N P V L S T P N G R Q L E K A I S Q L E  
UniRef90\_UPI000367959D L T P A R T E G E G P I R A M V T S G N P V L S T P N G G Q L D T A L G Q L D  
UniRef90\_L0FAB1 K F F E Y V N K P N A I V K A G V F Q G N P H Q Y S T P D Y N K A K E W F K G F E  
UniRef90\_G2FFF3 P R A K D P V M K M N C F W V M C N N N M Q A A A N M D E S Y P G W R R P E N  
UniRef90\_Q0A5X1 A K N H L T G S P Y K M D T I M F Y T V I G P I Y S G P D C T I W E E A L Q D V  
UniRef90\_A3XFM6 A E E M E T P G E G Q I K A M I T V A G N P V L T A P N G Q R I D R A F Q N L D  
UniRef90\_D2RUQ8  
UniRef90\_T0J1J9 V E A L E A M R D G R S K A L I G L G G N L A V A M P D P E A C F R A V A R K L D  
UniRef90\_M4Z572 E P V P V R K A M L I Q N T N P M T V A P E Q E L V R Q G F A R E D  
UniRef90\_Q828S2 E I D T A T G E G S P V R A L I A V A T N P V L S A P D G D R L D K A L G S L D  
UniRef90\_S3ZHB8 R A D D G G L G A S P V R A V V A V A T N P V L S A P D G D R L D K A L S S L D  
UniRef90\_UPI000475D275 Y E M M E K V H E R E I R T L F L M G S N P I V S N P N A N F V E E G L R K L D  
UniRef90\_U0G0S1  
UniRef90\_K1E139 E L L R S L G T P D G P R A L L V H G A N P V V S A P R A D A V A D R L R A L D  
UniRef90\_V3T0H2 E A M L R D E V K V L I T L I G G N L A A A A P D T E R T A D A I S R C H  
UniRef90\_UPI00035DFE55 G D R E A L F D G P P V T A M L I Q N T N P V S V C P E Q E L V K R G F E R D D  
UniRef90\_F2G722 A E E I L T P G D G Q I K A M V I G A G N P V V T T P D N A E Q L D K A F A Q L D  
UniRef90\_W4LB02 R D L L N P D L D P P I K G V F I Y N H N P V I V H P D Q N T M K R A L S R E D  
UniRef90\_I4KVC1 A A M E E G R A K V F I G L G G N F A Q A T P D T P R T H A A L R K C D  
UniRef90\_A8SN47 P E M L D G A A E G S V K A M Y I M G E D P V L S D P D A N H V K H A L S N L D  
UniRef90\_A8ZZE8 A E E I L T E G D G R V R A L L T V A G N P V L G A P N G R M M D R A L A H L D  
UniRef90\_H6R1L4 A D E I T T P G E G Q V R A V I T V A G N P V L S A P N G A R L D S A F A G L E  
UniRef90\_V4GRY7 V G T L E A V D D G P V E A V W A V A T N P V A G M P D A T A V R E A L S Q L D  
UniRef90\_A4T8R6 P D E I T T P G D G Q I R A L L L N C G N P V V S G P D G A R L D H A L S Q L D  
UniRef90\_K0UWC8 P D E I T T P G R G Q I R A L L I N S G N P V V S G P D G A K L D H A L S Q L D  
UniRef90\_B8HFG4 Q L L K S L G K V D G V R C L F V H A S N I A V A M P D A N A V I E G L R S L D  
UniRef90\_R4KBC0 V D L K K K V E R K P I N I Q M I W H S G L L Q T R E G M Q G I Q V H R K V E  
UniRef90\_G4HV67 A D E I D T P G P G Q P R A L I M T A G N P V L S A P D G N A L S R A I R R L D  
UniRef90\_E2ZAB8 K V L R E S D P K K Q I H A Y I L I G E D P A Q S D P D L P E I R E T L S K I D  
UniRef90\_V4Q7U6 V A A M E A M A G G R S K I M I C L I G G N L A V A M P D P T R S F A A V R S L D  
UniRef90\_B2A6V7 V I T N R M A D P Y D I K M I M A Y W N N F A F S A P E A R R W E E A L K K V D  
UniRef90\_W7QX04 G P N H L A G D P Y K L D T A M F Y T N P I W T A P D P K V T W E E A F K D V  
UniRef90\_S3ZQ07 R A L R D G E A K V F F A M G N F V S A S P D T E V T E A M R R A R  
UniRef90\_Q0AC66 C A K H H L A G D P Y K L D T A M F F V I T N P I W T A P D P R L W E E A L K D V  
UniRef90\_F4AM94 V E T V H G M Q K G Q K V L F A L G G N F F R A M P D H Q A N D A G L R Q C E  
UniRef90\_UPI00036EC001 Q A M L E G R S K V F I G L G G N F A Q A T P D S S R T H Q A L R N C A  
UniRef90\_E7QZ07 E L D A V R A F G D A I R G A Y V V G E N P A V S K R A T Q S V A R S L E S L D  
UniRef90\_A0KD89 V Q A M Q A M I D G T A K L L C L I G G N F A V A L P D P E L S F P A M A K L D  
UniRef90\_A4TDD7 A E E I D T P G D G Q I R G L T V A G N P V I S A P G S R R L D A A L S G L D  
UniRef90\_UPI00047A7D42 V L L Q H D P Y P V R T L M S F G T N L L V S Q A D T E R N Q A A L Q A L D  
UniRef90\_X5MNB2 P D E I L T D H P N R Y R A M W I E S G N P A H S M A D S T K W R E A L R L D  
UniRef90\_UPI0003796956 A D E I S T P G E G K V R A L I T I G G N P C L S A P N S A R L A E A L R L D  
UniRef90\_X7S163 A A L P D E I A A G N I R A L I N V I G S L V T S F P E T G K L I P A L Q S L E  
UniRef90\_Y1X1A8 H E M V E G I H D G E V H S L Y L Y G E D T G I V D S N I N F V Q A A F E K L D  
UniRef90\_UPI00037CFFA2  
UniRef90\_V1P9Y0 G V R G K D K L D V P I K F M W C Y A S N T L I N Q N R T H D I L Q D E N K C E  
UniRef90\_L8P775 E I D T A T D E G E P I R A L V A V A G N P V L S V P D G D R L D K A L D S L D  
UniRef90\_B7RT98 A D E I L T P G D G Q I K A L I C V G A G N P L L A W P D Q E K T H R A L E S L E  
UniRef90\_I4BQ70 A E E I E T P G D G Q I K A M I T I A G N P V L S A P D G N R L D R A L A G V G  
UniRef90\_G8TXX7 G R A L T E L T D P P I Q A L I V Y N S N P A A T A P Y Q R R V L E G L A R E D  
UniRef90\_UPI000255D0C6 Q L L H T M G T D D G V R G L L V H G S N V A V S A P D A D R V V E N L R A L D  
UniRef90\_W1UL05  
UniRef90\_B9QX58 D Q D A L V G G P P V K A M L I Q N T N P M S V A P E Q E L V R K G F E R E D  
UniRef90\_E3BIY8 K A M A E G D S K V F I A L I G G N F A A A T P D T E L T K K A L S S C D  
UniRef90\_E8YI25 A A M L D G K V K V F I G L G G N F S I A T P D T P R T W E A M R S C D  
UniRef90\_UPI000300FB84 R A L R D G E A K V F F A M G G N F V A A S P D T E V T E D A M R R A R  
UniRef90\_V4XXE8 E S E L L A A F G D D V R G V L V V G E N P V V S K R D R E W V T E R I D G L D  
UniRef90\_A0A059MJX0 R A L R D G R A R F F M G L G G N F V Q A A P D T H V T A A M R R A R  
UniRef90\_W5IM17 Q A M E A R R A K V F I A L I G G N F A Q A T P D T P R T H A A L R N C E  
UniRef90\_I0RLC0 A E E I L T D H P D R F R A M W I D S A N P A H S L T D S D S F R R A L A L D  
UniRef90\_R9PH07 E A M L K G Q S K V F I G L G G N L V A A A P D T G L S E Q A L A N C E  
UniRef90\_I4MZL8 A E E M L T E G G Q V R A L I T V A G N P V L S T P N G R Q L E Q A L D G L E  
UniRef90\_Q0SC94 R A M R D G K A H F F L G L G G N F V Q A A P D T D V T A A A L R K T R  
UniRef90\_G2S7E1 V Q A T Q A M I D G H A K A L I C L I G G N F A V A M P D H E N G F P A M H T L D  
UniRef90\_H5X0B4 A E E I D T P G E G Q I R G L I T S A G N P V L S T P N G A R L D D A L A G L D  
UniRef90\_S4YR71 S D E I L T E G E G Q L K G F M T V A G N P V L S T P N G E K L D Q A F E Q L D  
UniRef90\_V6PXU3  
UniRef90\_I0H1U2 K A F R D G R A S V L V A L I G G N F V A A M P D T A V T A A M R G A A  
UniRef90\_H8Z3R4 A E E M Q T P G A G Q V R A L L T V A G N P A L S M P G G A A L D R A L A G L D  
UniRef90\_K2FKU9 V D L F Q A V E S G K I K A L I W I A T N P I V S L P D A D Q V K R A L E K C E

UniRef90\_UPI0004716213 L V I V S E M R D T D T S R F A H I R F P A L G W G E K E G T V T N S E R  
UniRef90\_A7BUA3 F L V V S E P Y P T L T A M A A D L I L P A M W I E K E G A Y G N S E R  
UniRef90\_D2PYE0 F M V A V D P Y I N E T T R H A D V I L P P T P P L E R D H Y D F H Q L A V R N  
UniRef90\_MODEZ6 F L V V Q D A F R T E T V E Y A D V V L P A A T W G E T E G T A M N M E R  
UniRef90\_A0A013WSE0 C M V S L D N Y L N E T T R H A H V I L P S P S F L E S A H Y D M W S W V F  
UniRef90\_W4A3H2 L T V T I D L Y R T V T G E M A D Y V L P A T D W L I E H E D L N F M G V A M E P  
UniRef90\_UPI00036B0242 F M V S L D M Y V T E T S R H A D I L L P P T G P L E H S Y I D A V F T A M E R N  
UniRef90\_B2JLN7 F V V N Q S I W M E G E A Q F A D I L L P A C T S L E R W D I G E W A N S G H R  
UniRef90\_E1HV40  
UniRef90\_D6S7Y0 F F V T C D R F M T E D A Y F A D V I L P A T T Y Y E E D R Y A L Y P D R I E I  
UniRef90\_UPI00046E9CC3 F V C V H E Q F M T E T A K M A D I V L P A T T F V I E H D D I Y Q G G G Q N H I  
UniRef90\_K9HLL6 F I V V S D A Y P T V T T R Q G A D L I L P A A M W V I E K E G A Y G N A E R  
UniRef90\_Q15TN4 F V A A V D F Y I T E T S R H A D I L L P P V T A L E R D H Y D V V F H N  
UniRef90\_Q2S7U6 F M V S I D M Y V T E T S R H A D I L L P P A G P L Q R S H I D  
UniRef90\_I6EA50  
UniRef90\_M5IQ92 C F I V Q D L F F T E S A H K A D V V L P A A G W G E K D G T F I N T S R  
UniRef90\_K5BG34 L M V G L D L Y L T E T T A H C D Y V L P V I T T M Y E R D D F T F Q T F Q A T P  
UniRef90\_UPI00041B9BEB F K V C F D M F M T D T A K K C D L F I P T T S T L E S E D L L Y S S M T N P  
UniRef90\_M2X826 L I V T V D L Y R T V T G E L A D Y V L P A T D W L I E R E D V N F M G V A M E P  
UniRef90\_G8RQH5 L M V G I D L Y V N E T L A H C D Y V L P A A S M Y E R D D F P F Q T L Q P T P  
UniRef90\_A4TAJ3 L V V I D V A M E T A R L A H Y V L P A A S Q F E K E A T F F N L E F P H N  
UniRef90\_X0RNZ8 F L V V Q D I F M S E T A Q F A D V V L P S A S F A E K D G T F T N T D R  
UniRef90\_H2CEY9 L M V S F D I Y V N E T T R H A H Y I L P P T S T L I E H D H Y D L I F N A V R N  
UniRef90\_UPI000367959D F M V S V D I Y R N E T T R H A D Y I L P P A T G L I E H Y D L T F H A L A I R N  
UniRef90\_L0FAB1 F I V A V D S H Q C D T V N F A D I V L P A G T C F E S E Y D I G Y L I T E R N  
UniRef90\_G2FFF3 F I T V S D P Y P T V S A Q A A D I L L P A M W I E K E G A Y G N A E R  
UniRef90\_Q0A5X1 F V I D T S P S P Q E S A Q F A D L I L P D H T Y L E R L E V A N T Y P F G Y P  
UniRef90\_A3XFM6 F M M S I D L H I N D T T R H A D I L L P A S V A L E E D D M V F H S F A V H N  
UniRef90\_D2RUQ8  
UniRef90\_T0J1J9 L S V N I L T K F M N R T C L L T A K E T L V L P C L G R T E L D E Q A T G A Q F  
UniRef90\_M4Z572 F V A V H E Q F M T E T A K L I A D I V L P A T M F M E H D D L Y Y G G G H Q  
UniRef90\_Q828S2 F M V S V D P Y L N E T S R H A H V V L P P P P S Q A P H F D F A F N A F H N  
UniRef90\_S3ZHB8 F M V S V D P Y L N E T S R H A H V V L P P P P S Q H H D F A F N A F A V R N  
UniRef90\_UPI000475D275 F L V V A D M L M S E T A Q M A D V I L L P T S S Y L E N E G T L T N L E G  
UniRef90\_U0G0S1  
UniRef90\_K1E139 L L V V C D V V P S E T V A L A Q L V L P V I T Q W A E E E G T M T N L E G  
UniRef90\_V3T0H2 L T V H I S T K L N R S H I I T T D E D T L I L P T L G R T D Q D I Q A S G S Q F  
UniRef90\_UPI00035DFE55 F V C V H E Q F M T E T A K M A D V V L P A T M F V I E H D D I Y R G G G H Q  
UniRef90\_F2G722 F M V A V D F Y I T E T S R H A D V I L P P V T A L E R D H Y D I V F H N  
UniRef90\_W4LB02 F T V V C D V V M T D S A Y A D V V L P A C S H F E Y A D L Y P A Y G Q H  
UniRef90\_I4KVC1 L T V H I A T K L N R S H L V T G R E A L I L P C L I G R T D I D I Q E Q G P Q G  
UniRef90\_A8SN47 F L V V Q D I N L T E T A K L A D V V L P A T C Y A E K D G T F T A S E R  
UniRef90\_A8ZE8 F M V A I D W Y I H E S S R H A H I V L P P T C L I E H H F M T M I N G A R N  
UniRef90\_H6R1L4 F M V S V D C Y L N E T T R H A D V I L P P P R P L Q S P H Y D F  
UniRef90\_V4GRY7 F L V V Q D A F R T E T V E L A D V V L P A A T W G E S D G T A T N M E R  
UniRef90\_A4T8R6 L L V A I D F V Q R E S H R H A H W L L P A V H W L I E R A D L L A F T S N L H D  
UniRef90\_K0UWC8 L L V A I D F V Q R E S H R H A H W L L P A V H W L I E R A D L L A F T S N L H D  
UniRef90\_B8HFG4 F L M V C D S F M S E T A M A M A D L V L P V L Q W A E E E G T L T N L E G  
UniRef90\_R4KBC0 F V L S Q S S F L T N S Q A D V I L P I T W W E R E G N F P S S G C N R D  
UniRef90\_G4HV67 L V V S I D L Y M N D S A R Q A D Y I L P A P T F L I E R S D I T F S A H M P I P  
UniRef90\_E2ZAB8 F V V I Q D I F F N K T S E Y A D V I F P A T A W G E H E A V Y S S C D R  
UniRef90\_V4Q7U6 L A V H I A T K P N R S H L L L A K D N L L L P C L I G R T E M D V Q A S G P Q S  
UniRef90\_B2A6V7 F I V H M V T H E S E M T R Y A D I V L P S T H H F E Q W G F L N Q K G N K H T  
UniRef90\_W7Q0X4 F V I D T S P P G E T A M Y A D I L L P D S T Y L I E R L Q D S P T Y P F E G W  
UniRef90\_S3ZQ07 L T V H V S T K L N R S H A V T G A R A L I L P T L G R T E R D L Q G G E Q F  
UniRef90\_Q0AC66 F I I D T S P Y P G E T A M Y A D I I M P E H T Y L E R L Q D S P T Y P F E G W  
UniRef90\_F4AM94 L T V Q V S T K L N R S H L H T G K Q A L I L P A L G R T E I D T Q A S G I Q T  
UniRef90\_UPI00036EC001 L T V Q I S T K L N R S H L H M G R D A L I L P C L I G R T D I D L Q A G G E Q A  
UniRef90\_E7QZ07 F L L V Q E A F P T E T V E H A D V V L P A S L W A E K G G T V T N L D R  
UniRef90\_A0KD89 L S V H L G T K L N R S H L L V I G K E T F L L P V L I G R T E L D M Q A T G R Q S  
UniRef90\_A4TDD7 A M I S V D N W L N E T S R H A H V V L P G L S P L E R A H C D D Y W M Y S V A  
UniRef90\_UPI00047A7D42 F H V H V D M Y M N P T A S N A D I V L P A S M P W E R E A L K L G F E I T Q H  
UniRef90\_X5MNB2 L V V M D V A M T E T A R E A H Y V L P S P S Q Y E K W E T F F N F E P K N  
UniRef90\_UPI0003796956 F M V S V D V Y L N E T S R H A D V I L P G P T P L E R P H Y D L A L Y Q F A V  
UniRef90\_X7S163 V F A T T E I I N N E T T E L A T H V L P T K D P L E R P D I T L H D I S S H V  
UniRef90\_Y1X1A8 F M V V Q D E F L T F T A T Y A D V V L P A S P S L E K D G T F T N T E R  
UniRef90\_UPI00037CFFA2  
UniRef90\_V1P9Y0 M L V C I D H F M T A S A K Y S D I L L P D L M P T E Q E D L I P H E E A G N M  
UniRef90\_L8P775 F M V S V D P Y L N E T S R H A H V V L P P P P A Q S P H H D F A F N A V R N  
UniRef90\_B7RT98 L L V C V D I K M A A T A Q M A D Y V L A P K I C L E R E D V T L T D V W H P  
UniRef90\_I4BQ70 F M L S I D P Y L N E T T R H A D V I L P P P P P S R S P H F D F  
UniRef90\_G8TXX7 L M V V H D S F M T D T A R Y A D Y V E P A A M S W E I S D L H L S Y W H R  
UniRef90\_UPI000255D0C6 L L V V A D F F L S E T A E E A D V V L P V L Q W A E E E G T M T N L E G  
UniRef90\_W1UL05  
UniRef90\_B9QX58 F T V V H E Q F M T E T A E M A D L V L P A T Q F L I E H D D I Y K G G G H Q  
UniRef90\_E3BIY8 L T V N I A T K L N R T S H I V T P G K T S L I L P C L I G R T D V D M Q K A G A Q K  
UniRef90\_E8YI25 L T V H I T T K L N R S H I V T H G R D A L I L P T L G R T E I D L Q N G V A Q G  
UniRef90\_UPI000300FB84 L T V H V S T K L N R S H C V T G A R A L I L P T L G R T E R D V Q S G G E Q F  
UniRef90\_V4XXE8 A L V V A D V V E T E T T E R A D V V L P A S V A V E K R G T V T N L D R  
UniRef90\_A0A059MJX0 M T V Q V S T K I N R S H L V C G E T A L I L P A K G R T E Q D V Q A S G P Q F  
UniRef90\_W5IM17 L T V H I A T K L N R S H L V T G R D A L I L P C L I G R T E V D M Q A E G P Q G  
UniRef90\_I0RLC0 L V V V D A V A F T E T A R H T A D Y V L P A A S Q F E K W E M T F N F P C N  
UniRef90\_R9PH07 L T V S I A T K L N R T H V I T P G K Y S L I L P C L I G R T D V D M Q A A G P Q K  
UniRef90\_I4MZL8 F M L S I D L Y I N E T T R Y A D L I L P S T S A L E N D H Y D T F N A V R N  
UniRef90\_Q0SC94 M T V H I S T K I N R S H L V C G D T A L I L P T K G R T E Q D V Q A G P Q F  
UniRef90\_G2S7E1 L S V H V G T K L N R T H L V I G K E T Y I L P C L I G R T E L D M Q Q T G  
UniRef90\_H5X0B4 F M V S I D P Y L N E T T R H A D V I L P P T A P L E R P H Y E L A L A N Y S V  
UniRef90\_S4YR71 F M V A I D Y F V N E T S R H A N I L L P P V S P L E R D H Y D V T F N N F H N  
UniRef90\_V6PXU3  
UniRef90\_I0H1U2 L T V Q I S T K L N R S H V E A G R T A L I L P T L I G R T E R D H T G G R E Q R  
UniRef90\_H8Z3R4 F M V S V D F Y R N E T S R H A D I L L P P V S P L E R E H Y D L V F N F L A I  
UniRef90\_K2FKU9 F V V V S D I C L D D T T Q Y A D V L L P A L G W G E K D G T V T N S E R

UniRef90\_UPI0004716213 R I S R Q R A F L P A P G E A K P D W W I V A Q V A K Q L G H W Q H P H E I F C  
UniRef90\_A7BUA3 RT Q F W R Q Q V T A P G D S K S D V W Q L V E F S K  
UniRef90\_D2PYE0 T A R W N D A V L P R P A H A R H D W E I F R  
UniRef90\_MODEZ6 T V S R V R A A T D P P T N V H T D L D I I C D V A R R V V P G L L P S P P A D  
UniRef90\_A0A013WSE0 C L T S G G H Y S P P I F P V T D R P D H W R V V A R V G A T I G G Q P S A D  
UniRef90\_W4A3H2 Y V Q Y T P A V V P P R G D R R D D W W I L S R I Q Q E M G V E T D S P D P D P  
UniRef90\_UPI00036B0242 T V K Y S P P V F Q A Q P G S F H D W E I F L E L S R R  
UniRef90\_B2JLN7 M V T M Q H K C I E P L G E S R S D Y D I F T A L L T R L G L G G V F T E G C G  
UniRef90\_E1HV40  
UniRef90\_D6S7Y0 K E K L V E P L G N S L P N I F I L K K I A D A L G F G E Y Y P E N F D  
UniRef90\_UPI00046E9CC3 T L G R K V I E P L G E C R S N H W V I C E L A K R L G A E H E G F Q L T E  
UniRef90\_K9HLL6 RT Q F W H Q L V D A P G E A K S D L W Q F A E F S K R F T T D E V W P E D N D  
UniRef90\_Q15TN4  
UniRef90\_Q2S7U6  
UniRef90\_I6EA50  
UniRef90\_M5IQ92 R V Q R T R K A S E P V S G V E P D W K V V C N I A N R M G E G F D F A S P E Q  
UniRef90\_K5BG34 F R Q A T D A V I A P V G Q A R T E W D I V D A L L A R I W V R T P V F A G  
UniRef90\_UPI00041B9BEB Y I I Y N E K V V E P L D K R M D E Y E F K E L A K R L E M K D Y P F I S K R  
UniRef90\_M2X826 Y V Q Y T P A V V P A R G R R D D W W I L S R I Q Q E M G V P G D D P E P N P  
UniRef90\_G8RQH5 F R Q A T E P V V A P R G Q A R A E W E I I D D L T S R L G R R T P G F  
UniRef90\_A4TAJ3 T F H L R H P L M E P L G T L P E P E I W A R L M R A L G  
UniRef90\_X0RNZ8 S V Q R V R K A I E P L G D A Q P D W W I T C Q I A Q R M G G K G F D F E P S Q  
UniRef90\_H2CEY9 T A Y Y S R P I F E P E E G S L H D Y E I F A D L T K R I E L V R S N K A  
UniRef90\_UPI000367959D T S R Y S D P M V P K P D G M L Y D W E I Y E Y L R L Y L E D E Q Y D Q H T G P  
UniRef90\_L0FAB1 H V L L Q E K V I E P L F E S K S D F Q I E K E L A E L M G F A Q Y M P E S P E  
UniRef90\_G2FFF3 RT Q F W R Q Q V A P G E S K S D L W Q L M E F S K Y V K V  
UniRef90\_Q0A5X1 M S M I R E P A V K P L Y D T M Q F G N I M I E L G K R M P G P M A D Y Y Q Q V  
UniRef90\_A3XFM6 T A A F A K P I F E T P N G N P Q E W E V I S R L A A R  
UniRef90\_D2RUQ8  
UniRef90\_T0J1J9 V T V E D S M S M V H A S R R G K L K S P G P L V R S  
UniRef90\_M4Z572 H I S V I G S P K L I D P P G E C R S N H E V L Q S L A R R L R A V H P G F E M T P  
UniRef90\_Q828S2 Q V R Y T R A A V P L E P G R M A E T E I L R L V K A V T D P H A P V H G R D  
UniRef90\_S3ZHB8 Q V R Y T R P A V P L E E G R M A E T E I L R L V L A A T G M H G A D P E A V D  
UniRef90\_UPI000475D275 R V L L R E A A R P V P G L V K Q D W E V L S G V A E S L E K G S Y F S Y S S A  
UniRef90\_U0G0S1  
UniRef90\_K1E139 R I I R R K A I D P P D G V V S E L W V W A Q L A A R D A P G T W S T V P S E  
UniRef90\_V3T0H2 I T V S F S M V H A S E G V G Q P L S P E Q R S E I A I V A G I A Q A T L G N N  
UniRef90\_UPI00035DFE55 Y I L L G P K L I D P P G E C R S N H E V N N A L A R R L G V T H K G V E M D A  
UniRef90\_F2G722  
UniRef90\_W4LB02 F L Q R A E P V I P P V G E S L P N T E I F R R L A A R F G F T E P E F Q A S D  
UniRef90\_I4KVC1 V T V T F S M V H I S H G Q L K P K S P L M R S E P A I I A G I A N A T L G N H  
UniRef90\_A8SN47 R V Q R V R K A V E A P G Q A R L D W T I L A D V S R R L G G K G F D W E K S E  
UniRef90\_A8ZZE8 Y A A Y S Q P V F Q P Q P G T R H N W E I L S E L S A R F  
UniRef90\_H6R1L4  
UniRef90\_V4GRY7 R V S R V R P A M E T P P G I R T D L D I V T T V G E R V V P G L F G A A D P E  
UniRef90\_A4T8R6 E P Y L H F R G A V E P P P G A R Q E W R I F V D L A L A M G K P L F R A K G L N  
UniRef90\_K0UWC8 E P Y L H Y R A V E A P P L A R P E W R I F V D L A L A M D R P L F G A P G  
UniRef90\_B8HFG4 R V L R R R R A L T P P A G A R S E L W I M A R L A E R L E A P S T Y S E D P E  
UniRef90\_R4KBC0 I M L V Y S N V I K P I Y E A K D D E W V N I Q L G L L D V P E K D M Y P I S  
UniRef90\_G4HV67 W L Q A T K R V L D P P P G V R E E W W I F E Q I A R R M G  
UniRef90\_E2ZAB8 R F Q R V H K L V D P D P N V K T D W E I L C L V A T A M G Y P M H Y N N T E E  
UniRef90\_V4Q7U6 M V H A S T G K L P P S E H V R S E P A I V C A M A R A V L G D R Y N I P W E  
UniRef90\_B2A6V7 H L W L A R P M I E R F F D V K D S E A E V Q W F D K L L E H F K N F K D P E T  
UniRef90\_W7QOX4 P M T A L R P A V E P I Y D T R H F G D I L I G I G K R L D G P A G E Y Y R E L  
UniRef90\_S3ZQ07 V T V S M G M V H A S R G R L A P S P H L L S E P A I V C R L A R R V L G P E  
UniRef90\_Q0AC66 P M A A L R P A V D P V Y D T K H F G D M I I E I G K R I N S P M A D Y Y R E L  
UniRef90\_F4AM94 I T V E N S M G V V Q T S H G K I P S E L L K S E I D L A E L A V N T L P N D  
UniRef90\_UPI00036EC001 V T V E D S F S M V H A S Y Q L R P L S A Q M R S E P A I  
UniRef90\_E7QZ07 Q V Q R M R P M T P P P D G V R R D L D I L L E I G R R L T D A R F E Y D D R E  
UniRef90\_A0KD89 I T V S M S M V H A S A G K L K P A S D Q L R S E P A I V A G I A H A T L P N S  
UniRef90\_A4TDD7 S C V K W T E P V F A S T R P D R P Q E W E I L I I H T A C Q A D D T P L S G R D  
UniRef90\_UPI00047A7D42 H V Q L R P R A L N A M G E S R A D Y E I V L E L A K R L G L Q D E F F G G D I  
UniRef90\_X5MNB2 V H H L R P V L K P V I G N V L P E P E I H A R I M D A L G  
UniRef90\_UPI0003796956 R N V A N W T P A A V A T E V Q E W Q T L L R L T G V V T G Q G P D A D A L D  
UniRef90\_X7S163 S V Q Y S P A V V E P V G E R R S M W W V F A E L G R R L G Y N L G D P D T S T  
UniRef90\_Y1X1A8 R I Q R L Y Q A L E P L G D S K P D W K I F Q A I A N R L G F D W N Y K H P S E  
UniRef90\_UPI00037CFFA2  
UniRef90\_V1P9Y0 Y V I L L G Q P S T S P K F E R K P I Y W T M S E I A K R L G P D V Y Q Y F Y R R  
UniRef90\_L8P775 Q V R Y T R P A V P L E P G R M A E T E I L R L I L A A T G M H G A D P A A V D  
UniRef90\_B7RT98 Y S Q Y T R A V V E A R G D E I E E W Q V F W E L G K R M G  
UniRef90\_I4BQ70  
UniRef90\_G8TXX7 Y W Q W N R P A V A P P G E A V S N P E F F R R L A R A L H L T D P A L V A S D  
UniRef90\_UPI000255D0C6 R V L R R R R A V E P P A G P R S E L E I L A E L A R R L G S E L D F T E P A E  
UniRef90\_W1UL05  
UniRef90\_B9QX58 Y L L L G S P K V V E P P E G V P K E N L F V L N E I A A R V D S K S H A G F E K S  
UniRef90\_E3BIY8 V T V S F S M V H A S G V V N S D T A N M R S E P A I I A G I A H A V L G K D  
UniRef90\_E8YI25 V S V S M S M V H I S Y G M N K P A S E N L L S E I A I V A R M A H A T L G S D  
UniRef90\_UPI000300FB84 V T V S M G M V H A S R G R L A P A G E Q L L S E P A I V C R L A R R V L G E S  
UniRef90\_V4XXE8 Q V Q R L H P L A D P P G A A R P D F A L L R A L G R R L S P A P F D  
UniRef90\_A0A059MJX0 V T V E D S T C S V H A S R G P L P P A S A H L K S  
UniRef90\_W5IM17 V T V T F S M V H I S H G Q L K P R S P H L R S E P A I A G I A K A T L G N R  
UniRef90\_I0RLC0 T V Q L R P V L D P L P G T L P E P E I Y A R L R A L G G V  
UniRef90\_R9PH07 V T V S F S M V H A S A G L V D E S A D D M R S E P A I I A G I A N A V L G A S  
UniRef90\_I4MZL8 V S R F N R A I L P K P E G A L H D W E I F V  
UniRef90\_Q0SC94 I T C S V H A S R G P L K P A S P H L D S E V G I V T R I A E A T I G D R Y G L  
UniRef90\_G2S7E1 R Q S I T V E D S M S M V H A S S G K K P A S P L I R S  
UniRef90\_H5X0B4 R N A Y S P S V L P R G P E Q R H D W E I V L E L A S R  
UniRef90\_S4YR71 V A K Y S K A L F R K D K D A K H D W Q I Y L E L A K R  
UniRef90\_V6PXU3  
UniRef90\_I0H1U2 I T V S M S A V H A S R G S A P A G P L L R S E V D L V C G I A A A T L G D R  
UniRef90\_H8Z3R4 R N V A K W P V L A P P A G A E G D W E L L S G L H R R L A E N W  
UniRef90\_K2FKU9 R I S R Q K A F L P A P G E A E D W W A L S R V A Q V L G F R G F D F N N S H

UniRef90\_UPI0004716213 E H A A T A F E N D G A R A L N L H D L A T L T R D A W D Q L E P Y Q W P T G 530 540 550 560  
UniRef90\_A7BUA3  
UniRef90\_D2PYE0  
UniRef90\_M0DEZ6 P A E L F D E F R R L T A G T K A D C A G I T Y D R L D A E Y A V R W P A K  
UniRef90\_A0A013WSE0 I D A M D D G Y F R A L A T G R G I D P D M A I M A L P N  
UniRef90\_W4A3H2 L A N A D A A M R D S G L S I E R L K E M P C Q T A V L P E A D P S H V F T I A  
UniRef90\_UPI00036B0242 E L D W V K R V F D S S D L P D H I S W R E F C R K G Y F D M R W F A E G R R K  
UniRef90\_B2JLN7  
UniRef90\_E1HV40  
UniRef90\_D6S7Y0 D L L D K A F Y H T P E L K E L K E K G V Y H  
UniRef90\_UPI00046E9CC3 I E L I E K L L K S S G W P D V E T F M  
UniRef90\_K9HLL6 E I E E Q K G L F E E Y R V F G L G K A H D L A P F D V Y H D T R G L R W P V V  
UniRef90\_Q15TN4  
UniRef90\_Q2S7U6  
UniRef90\_I6EA50  
UniRef90\_M5IQ92 I W N E I R E L M P K F F G G I S Y Y R L G R L G G I S W P C P  
UniRef90\_K5BG34  
UniRef90\_UPI00041B9BEB E Y I E K L I E P L N E Y I E D I S L E K L K E N Y I T I H D S V A W R  
UniRef90\_M2X826 L A A V D A V M R D S G L T I D R L K E M P C Q T  
UniRef90\_G8RQH5  
UniRef90\_A4TAJ3  
UniRef90\_X0RNZ8 I M E E I C R L T P S Y G G I T Y E R L E Q G R I Q W P C P  
UniRef90\_H2CEY9 L P D N L V K T R M T P A A F I D H A L K A G P Y G E S G P R A M G M S L E L L  
UniRef90\_UPI000367959D Q P E N P E Q K I D L A L R Y G R Y K D  
UniRef90\_L0FAB1 E F V R A Q L N S P D P S L Q G I T V E S L R A N K C V M R L N V  
UniRef90\_G2FFF3 E D V W P E D L I A K K P E Y A G K R L Y D V L Y T N G Q V D K F P K Q  
UniRef90\_Q0A5X1 G S V E N V V A A F A A G F E N D P G D N G V N D L A S F K E K G V W Y K T P Y  
UniRef90\_A3XFM6  
UniRef90\_D2RUQ8  
UniRef90\_T0J1J9 E P A I V A G L A K A A M P R S L V D W D A M V A D Y D R L R E G L E Q V Y P D  
UniRef90\_M4Z572 R E L I D A T L K K S G H G D I A A L E A D V W R D L Q P D F R T S H Y L D  
UniRef90\_Q828S2 P G E L A A V L T G D S R R L D M M L R L G P Y G D G F G A R P D G L T L E K V  
UniRef90\_S3ZHB8 D L A I D R T L G K A G R D P K E L A G L T G E N G P E R R L D M M L R L G P  
UniRef90\_UPI000475D275 E H I F E E L R V A S R G G L A D Y Y G I T Y D R L R K E E G V Y W P C P  
UniRef90\_U0G0S1  
UniRef90\_K1E139 V F D E L A R A S V G G R A D Y S G L S H A R L D R E T D L H W P C P  
UniRef90\_V3T0H2 H V D W L A L A A D Y G L I R D Y I A A T L P G F N D F N Q R  
UniRef90\_UPI00035DFE55 R E H I D W M L R N S N R G T L A E L E E A G W  
UniRef90\_F2G722  
UniRef90\_W4LB02 A E L I D D A V D G D D I R L Q G I A P S Q L P T D  
UniRef90\_I4KVC1 P I D W L W T V A D Y G R I R D L I A D T I P G F K D F N T K L L H P  
UniRef90\_A8SN47 D V F D E I R K C M P T Y R G I T Y D K I D K L N G V Q W P C P  
UniRef90\_A8ZZE8  
UniRef90\_H6R1L4  
UniRef90\_V4GRY7 P V F E E F A A L T A G T P A D L S G V S Y D R L D D A G A V R W P A P  
UniRef90\_A4T8R6 A F I T A T R R V A R V T R R P Q L E F S P A W T G R K F N G R R I R W R E V L  
UniRef90\_K0UWC8 L N R L V R T S R R L A R L T G R A G L E F G P D W G R R I R W S D V R  
UniRef90\_B8HFG4 T V F E E L R L A S A G G L A D Y S G L D Y A M L D R G D A A Y W P Y P  
UniRef90\_R4KBC0 Q K Q R F E P L V E I T A K D I E E W G C E G K P Q N K F L A D G I Y Q V E R H  
UniRef90\_G4HV67  
UniRef90\_E2ZAB8 I W D E M L S L S P K Y Y G A T Y E K L E A N Y G I Q W P C Y  
UniRef90\_V4Q7U6 A Y A D N Y D L I R D A I A D V L P A F H D Y N A R I Q V P G G F R L P I  
UniRef90\_B2A6V7 E K E P T N E I E F A E Y A T K L T L Q P I W D P N E Y E S G D Q F D G W E D F  
UniRef90\_W7QOX4 D S V E N V L R H R A A G F A D N P G D N G V N D F E S W K E K G V W Y K K P Y  
UniRef90\_S3ZQ07 S A T P W E E F E K D Y A S V R D R I A R V I P G F E D F N A R  
UniRef90\_Q0AC66 G D V E N M L R H R A A G F A N D P G D N G V N D F E S W K E K G V W Y K K P Y  
UniRef90\_F4AM94 D L D W L A F R S D Y R V I R D H I A N V I P G F E N F N Q R  
UniRef90\_UPI00036EC001 V A G I A N A T L G A W P V D W L V E D Y A R I R A L I A E T I P G F A N F  
UniRef90\_E7QZ07 E V I F D E L T R V N P L Y A G M S Y D G I G H G S Q R W P L P  
UniRef90\_A0KD89 K V A W L D L A D Y D R I R D L I R D K T V S G F E A F N E R  
UniRef90\_A4TDD7 P G E V F E A L D P E R M T D L G I R V G P W G D D L G R R P G G L T L D E V R  
UniRef90\_UPI00047A7D42 E A C W N H Q L E P L G I T V Q T L R Q H P E G  
UniRef90\_X5MNB2  
UniRef90\_UPI0003796956 E F V A A G L A G Q L G L T P A P D R T G P E R L L D L M L R A G P Y E L A D L  
UniRef90\_X7S163 D D D V L A V L L A G A R T G F D E V A A V G W A E A P R E L P A A W V D E  
UniRef90\_Y1X1A8 I M D E V A R L T P L Y A G V S Y D R L E G F N S L Q W P V I Q P D G  
UniRef90\_UPI00037CFFA2  
UniRef90\_V1P9Y0 P Y  
UniRef90\_L8P775 A M V I D Q T L G K A G R D P R E L A G L L A G D N G P E R R L D M M L R L G P  
UniRef90\_B7RT98  
UniRef90\_I4BQ70  
UniRef90\_G8TXX7 D E L L Q D A L E G Y P P E F R S R L R D Q G V V K A G P K  
UniRef90\_UPI000255D0C6 V F A E I G R A T R G A T A D Y S G L D Y A A L D D G Q A A Y W P L P  
UniRef90\_W1UL05  
UniRef90\_B9QX58 A R D H I A W M L E  
UniRef90\_E3BIY8 P I D W Q D L V T D Y G K I R H H I A R T I P G F E N F N E R L K E P G G F Y  
UniRef90\_E8YI25 K V D W L A H A A D Y S L I R D G I A D G F H D Y N E R L K R P G G F H L G V A  
UniRef90\_UPI000300FB84 S V V P W E R F E E D Y G L V R D R I S R V V P G F E E F N E K  
UniRef90\_V4XXE8 H D P A D A F A E L C R V A P A Y E G I D P D G T D G P R R W P  
UniRef90\_A0A059MJX0 E V I E V S R I A E A T L G D R Y G L D W K A M R D D Y G V V R G G C E S Y D V  
UniRef90\_W5IM17 P L D W D W A I A D Y G H I R D L I A D V I P G F A D F N A R L Q H P G G F H L  
UniRef90\_I0RLC0 D Q L I A D L T A A A R T D R R E F T A F A A S A D R A L M G L A P Y L  
UniRef90\_R9PH07 P I D W L A C V Q D Y D K I R D Y I E Q T I P G F E H F N Q R I Q Q P  
UniRef90\_I4MZL8  
UniRef90\_Q0SC94 E W K K M R D D Y A N I R L H I S R V V P G C E G Y E V  
UniRef90\_G2S7E1 E P A I V A G M A R A T L K Q T K V N W M E L V T D Y D L I R E L I E Q T I P G  
UniRef90\_H5X0B4  
UniRef90\_S4YR71  
UniRef90\_V6PXU3  
UniRef90\_I0H1U2 H G I P W E A F A S D Y D Q I R E R I G R V V P G C A G Y A A K  
UniRef90\_H8Z3R4  
UniRef90\_K2FKU9 E H A R L S A Y Q N G S L R Y F N L Q G L T H L S F A E Y H N L A P I Q W P V W

UniRef90\_UPI0004716213 D F P R R N V P V T P Q P H G F Y P L I L N T G R I R D Q W H T M T R T G Y

UniRef90\_A7BUA3  
 UniRef90\_D2PYE0  
 UniRef90\_MODEZ6 G P T D S T A Y R Y L N D D G S W S F E T P S G L A R V S T P A F D A P A L P  
 UniRef90\_A0A013WSE0 R G P D R L L D L A I R T G P F G D R F G T V A G L T L D S F R D E P D G L I  
 UniRef90\_W4A3H2 V Q H D D G L I D C C P  
 UniRef90\_UPI00036B0242  
 UniRef90\_B2JLN7 D L P E P L P M P S Q Y A E K F G M G L Q T P S G K L E F V P D L L K R H T A  
 UniRef90\_E1HV40  
 UniRef90\_D6S7Y0 F D K K P E V S Y K K Y D S F N T E T G K L E I H S K L L E K Y G F S  
 UniRef90\_UPI00046E9CC3 Q S K W V D A Q V P F E E A H F L N G F G H E D G K F H F A A D W S E G R N F S  
 UniRef90\_K9HLL6 D A D E T R W R F N A A Y D P Y Y Y F Y G N K D G K A R V F A L P Y E P P A E P  
 UniRef90\_Q15TN4  
 UniRef90\_Q2S7U6  
 UniRef90\_I6EA50  
 UniRef90\_M5IQ92 D E E Y P G T P V L Y A D H K S M L P G G K F R F A P  
 UniRef90\_K5BG34  
 UniRef90\_UPI00041B9BEB D K R F L T K S G K F E I  
 UniRef90\_M2X826  
 UniRef90\_G8RQH5  
 UniRef90\_A4TAJ3  
 UniRef90\_X0RNZ8 S T D H P G T P V L H T E R  
 UniRef90\_H2CEY9 Q K S P H G V D L G P L E P C L P A R L C T D D K K I R L V P D E L  
 UniRef90\_UPI000367959D  
 UniRef90\_L0FAB1 P N E P Y R A F M D H Q F Y T E S G K L E F Y S E D F I E E G Y  
 UniRef90\_G2FFF3 K V T D S D G N E Y A N D E M D H F G F Y A Q K G L F E E Y  
 UniRef90\_Q0A5X1 W D G H R Y S I R M S E D D V K A K L K T P S G K F E F Q P A W F T N E K H A  
 UniRef90\_A3XF6  
 UniRef90\_D2RUQ8  
 UniRef90\_T0J1J9 F H D F N R R V R E P G G F P D N R V W N T P S G K A Q F I A H P V E A A  
 UniRef90\_M4Z572 G F A H K D G K F H F K A D W A H P P F G  
 UniRef90\_Q828S2 L A H P H G I D L G P L T P R L P Q P L K T R S G K V E L L P G P I A G  
 UniRef90\_S3ZHB8 Y G D G F G A D P D H P H G I D L G P L G T R S G R V E L L P E P I A A  
 UniRef90\_UPI000475D275 S I D H P G E K R L F E T S F A H S D G K A A L L P V D  
 UniRef90\_U0G0S1  
 UniRef90\_K1E139 A T G E G E A P H P G T P R A F L D D F P T D G R A R L V P V D H L G P A E D  
 UniRef90\_V3T0H2 C A E P G G F W L G N A A E Y H F H T P T G K A R F S S A P L P P K G D D  
 UniRef90\_UPI00035DFE55 I D C Q P P F E E A H Y L N G F S Y A D G R F R F R P D  
 UniRef90\_F2G722  
 UniRef90\_W4LB02 E V L L M T A G G E D A L L Y Q T T F P A T P S G K L E L E S S Y L K Q A Y N H  
 UniRef90\_I4KVC1 G G F H L G N D A A R R I W K T D S G K A Q F V S V L P A H  
 UniRef90\_A8SN47 T A E H P G T K Y L H E G K F T R G D K A L M V P V E Y E G P K E L  
 UniRef90\_A8ZZE8  
 UniRef90\_H6R1L4  
 UniRef90\_V4GRY7 D A A S E G G Y R Y R T G D A S W A F E T P S G R A R F S T G E H G G V A E P  
 UniRef90\_A4T8R6 A H P H G W V L G P R E F G H F R E A L R T P D K V V R L A P P E F  
 UniRef90\_K0UWC8 A H P H G W V L G P R E F G H F R D A L R T P D K R V H V A P P E L V A R A R E  
 UniRef90\_B8HFG4 A G S T G T P R L F S E R F A H A D G K A  
 UniRef90\_R4KBC0 D G D N Y G N I A Y F I K D P V K N P L N S T T G L I E I Y S Q T K A D I G Y N  
 UniRef90\_G4HV67  
 UniRef90\_E2ZAB8 T R D P E D K G T K F L H E G A T F N K P E G K G H F Y F F P F T P V K E K  
 UniRef90\_V4Q7U6 G P A E R V W K T P S G K A E F  
 UniRef90\_B2A6V7 K A V G V W N S D E Y K Y K Q Y W D N F G T K T D K Y E F Y S E T L K D A L E K  
 UniRef90\_W7QX04 H W R L E R G R F Y E W D G L D Y K L L R T P S G K F E F K S G F L E A N A D  
 UniRef90\_S3ZQ07 V A H P G G F A L P H A P R D E R R F P T A T G K A N F T A A P V E  
 UniRef90\_Q0AC66 H W R Y W R G T F Y E W D G E G Y N I M P T A S G K F E F K S S F L E  
 UniRef90\_F4AM94 I D E L G E F V L P N A V R D A R Q F A T A T G K A N F V V H D I E  
 UniRef90\_UPI00036EC001 E E R I A A P G G F Y L G N A A R R W N T P S G K A R F Q A N Q L A S L L H A  
 UniRef90\_E7QZ07 D D A E E G T G I L H E E R F R T G E R R T A F E P V E D V P T R V S A H H D  
 UniRef90\_A0K8D9 I R T P G G F R L P L P P T E R V V T P T G K A M F  
 UniRef90\_A4TDD7 R H P D G L R L A E L E G R L P D V L T P S R R I E L H P L L E A  
 UniRef90\_UPI00047A7D42 M R F P Q A R F A Y R K Y E A P V A G G F P T D R R V Q L Y S E A L H Q I G Q  
 UniRef90\_X5MNB2  
 UniRef90\_UPI0003796956 E A A P H G I D L G P L R P R V P E V L R T A S G R I E L A P E A I  
 UniRef90\_X7S163 H V A R M G G W R L  
 UniRef90\_Y1X1A8 T D E P I L Y L E G F N F D N G K A K L F P  
 UniRef90\_UPI00037CFFA2  
 UniRef90\_V1P9Y0  
 UniRef90\_L8P775 Y G D G F G V R P D P L K S R L P Q P L K T A G G K V E L L P Q P I A D  
 UniRef90\_B7RT98  
 UniRef90\_I4BQ70  
 UniRef90\_G8TXX7 P E A R P F V D T P L L T D D G R I H L E P P P A A K P V D D  
 UniRef90\_UPI000255D0C6 A D P T S S T A R I T A P R M F R E R F A H P D G R A R L  
 UniRef90\_W1UL05  
 UniRef90\_B9QX58 L G N S A A E R Q W Q T M T G K A Q F I A H P L P E  
 UniRef90\_E3BIY8 S R E R I W K T P S G K A Q F L V H A I A  
 UniRef90\_E8YI25 V A R P G G F A L P H A P R D E R S F P T A T G K A N F T A A S L E Y P  
 UniRef90\_UPI000300FB84 D G E A V L Y R E A F A T D D G L A P V V D  
 UniRef90\_V4XXE8 N V R R P G G F V L P H A P R D S R S F H T A S G R A E F A V S P I  
 UniRef90\_A0A059MJX0 G N D A A E R V W K T A S G K A G F T P S E L  
 UniRef90\_W5IM17 L Y E T L G A T M P E Y R G T A A V W G L A Q L C A M A Y P D A V R R A G H V  
 UniRef90\_I0RLC0 G G F Y L G N S A R R R E W N T A T A K A Q F I S H P L P D D  
 UniRef90\_R9PH07  
 UniRef90\_I4MZL8  
 UniRef90\_Q0SC94 N V R R P G G F V L P H P P R D S R T F P T H S G R A E F A V S P I E V L Q V P  
 UniRef90\_G2S7E1 F D N Y N D R L R R M P L P P I Q R I W P T A T G K A M F  
 UniRef90\_H5X0B4  
 UniRef90\_S4YR71  
 UniRef90\_V6PXU3  
 UniRef90\_I0H1U2 I R D E G G F T M P H P P R D A R T F P T P E G K A V F T V S P L E V M T V P  
 UniRef90\_H8Z3R4  
 UniRef90\_K2FKU9 D K Q E V H Q V G Q L F S P G Q F S H A D G K A R L V P T V A A N P I H A

UniRef90\_UPI0004716213  
 UniRef90\_A7BUA3  
 UniRef90\_D2PYE0  
 UniRef90\_MODEZ6 E E P D  
 UniRef90\_A0A013WSE0 V A P A P R A H E  
 UniRef90\_W4A3H2  
 UniRef90\_UPI00036B0242  
 UniRef90\_B2JLN7 D N P E R P P  
 UniRef90\_E1HV40  
 UniRef90\_D6S7Y0 P P V Y D D G F E  
 UniRef90\_UPI00046E9CC3 G M P A P D H  
 UniRef90\_K9HLL6 P D D E Y D M W L  
 UniRef90\_Q15TN4  
 UniRef90\_Q2S7U6  
 UniRef90\_I6EA50  
 UniRef90\_M5IQ92  
 UniRef90\_K5BG34  
 UniRef90\_UPI00041B9BEB  
 UniRef90\_M2X826  
 UniRef90\_G8RQH5  
 UniRef90\_A4TAJ3  
 UniRef90\_X0RNZ8  
 UniRef90\_H2CEY9  
 UniRef90\_UPI000367959D  
 UniRef90\_L0FAB1 A P W E E P  
 UniRef90\_G2FFF3  
 UniRef90\_Q0A5X1 D M G F P H Y V E P  
 UniRef90\_A3XFM6  
 UniRef90\_D2RUQ8  
 UniRef90\_T0J1J9  
 UniRef90\_M4Z572  
 UniRef90\_Q828S2  
 UniRef90\_S3ZHB8  
 UniRef90\_UPI000475D275  
 UniRef90\_U0G0S1  
 UniRef90\_K1E139 L R P D A P L F L  
 UniRef90\_V3T0H2 P A P  
 UniRef90\_UPI00035DFE55  
 UniRef90\_F2G722  
 UniRef90\_W4LB02 P L P T F  
 UniRef90\_I4KVC1  
 UniRef90\_A8SN47 E N E E Y P  
 UniRef90\_A8ZZE8  
 UniRef90\_H6R1L4  
 UniRef90\_V4GRY7 T D E E Y P  
 UniRef90\_A4T8R6  
 UniRef90\_K0UWC8 L L A E  
 UniRef90\_B8HFG4  
 UniRef90\_R4KBC0 E V S P L P K Y V P P  
 UniRef90\_G4HV67  
 UniRef90\_E2ZAB8 E T E E F P  
 UniRef90\_V4Q7U6  
 UniRef90\_B2A6V7 H A A N H  
 UniRef90\_W7Q0X4  
 UniRef90\_S3ZQ07 Y P A V P E  
 UniRef90\_Q0AC66  
 UniRef90\_F4AM94  
 UniRef90\_UPI00036EC001 E L P E E P  
 UniRef90\_E7QZ07  
 UniRef90\_A0KD89  
 UniRef90\_A4TDD7  
 UniRef90\_UPI00047A7D42 P A P A Y V E P A  
 UniRef90\_X5MNB2  
 UniRef90\_UPI0003796956  
 UniRef90\_X7S163  
 UniRef90\_Y1X1A8  
 UniRef90\_UPI00037CFFA2  
 UniRef90\_V1P9Y0  
 UniRef90\_L8P775 D L P  
 UniRef90\_B7RT98  
 UniRef90\_I4BQ70  
 UniRef90\_G8TXX7  
 UniRef90\_UPI000255D0C6  
 UniRef90\_W1UL05  
 UniRef90\_B9QX58  
 UniRef90\_E3BIY8  
 UniRef90\_E8YI25  
 UniRef90\_UPI000300FB84 E L P E  
 UniRef90\_V4XXE8  
 UniRef90\_A0A059MJX0  
 UniRef90\_W5IM17  
 UniRef90\_I0RLC0 D  
 UniRef90\_R9PH07 V L P A  
 UniRef90\_I4MZL8  
 UniRef90\_Q0SC94 P  
 UniRef90\_G2S7E1  
 UniRef90\_H5X0B4  
 UniRef90\_S4YR71  
 UniRef90\_V6PXU3  
 UniRef90\_I0H1U2 P  
 UniRef90\_H8Z3R4  
 UniRef90\_K2FKU9 L S A E Y P



1 10 20 30 40  
UniRef90\_R7XV69 V C N L C A I C G L V L T I E D G T V T S V R G N P D D P L S R G H I C C  
UniRef90\_B5IF98 T D C A M E C L H C S L I S E M K D G K M R V R A N P K N K V T S N F L C C  
UniRef90\_U2M8B0 D G F D C M S C A W K T F E F C E N G A K A V T W E A T P E H P V S E L R E R  
UniRef90\_F0M2V7 D G F D C P G C A W S T F Q F C E N G A K A V T W E A T S K R V T A E F L J A A  
UniRef90\_G8WDL8 C T L C R S R C G T L N H I J A D D R L I A V S A D A S H P A M C L K G K  
UniRef90\_W0HXP8 G F D C P G C A W G T F S F C E N G A K A V S W E A T R K A V D A A F F A R  
UniRef90\_U0HXS2 I C P L C A T C G L T L T I E D G T V T R A R G D A E D V F S R G F I C  
UniRef90\_D9WEZ7 H G F D C P G C A W G T L S F C E N G A K A V A W E P S F F S Q Y S V A K L Y T  
UniRef90\_U3U9N9 H G F D C P G C A W K L A E F C E N G A K A V A E E A T K R  
UniRef90\_W9BH80 K T N C C H A K C G V L A H V D S S G T L V K V I E G N P E D P R N Q G R L C  
UniRef90\_I4A7L9 K T N C C H A K C G V L A H V D S S G T L V K V I E G N P E D P R N Q G R L C  
UniRef90\_Q24N20 C I L C E C N C G I L R T R V K D G K I T A I E P D D S Q M R P C V L G H  
UniRef90\_F5YSK5 C I L C E C N C G I L V L V E P D T G R F A K I R G D K A H P A S A G Y T C  
UniRef90\_D0WIN8 D G F D C P G C A W G A F Q F C E N G A K A V A W E S T G K I V D  
UniRef90\_A0KWD4 H G F D C P G C A W G E I R F C E N G A K A V N W E A T S K K V D  
UniRef90\_X7E7C5 G F D C P G C A W G E I R F C E N G A K A V N W E A T S R K V D  
UniRef90\_F6CU45 E G F D C P G C A W S F F F C E N G A K A V A W E A T T K R A T P E V F A R  
UniRef90\_B8H4C9 H G F D C P G C A W G E F R F C E N G A K A V N W E A T T R R V G  
UniRef90\_F0LX46 D G F K C P S C A W K K L E F C E N G A K A L A V I E A T R K R V T  
UniRef90\_K5YPY8 A T A C V L C E C N C G I T V I E L D G R R F A K L R G D K S H P A S A G Y T C  
UniRef90\_U5E3G6 G F D C P G C A W S T F Q F C E N G A K A V T W E A T K K R V T A A F L A Q  
UniRef90\_W0PIX0 D G F D C P G C A W S T F Q F C E N G A K A V T W E A T N K R V T P T S L L A  
UniRef90\_A4WBD6 K S V C G Y C G V G C G I E F D T S K L I G D P Q N S Y T L G T L C  
UniRef90\_B8FTZ6 D G F D C P G C A W N G V K A V A A E S T A K R V T P D F F A R H T V I E L L C  
UniRef90\_D5V5N2 D G F D C P G C A W N G V K A V A A E S T A K R V T P D F F A R H T V I E L L C  
UniRef90\_UPI00037A5144 T Q T I C P Y C A V G C V L N T K S G S V R R V T S D D H I G I N E G L C  
UniRef90\_UPI00046D6367 D G F D C P G C A W S T F E F C E N G A K A V R V T P D F F A A H T V I E L L C  
UniRef90\_I3IP17 G F D C P G C A W G E I R F C E N G A K A V N W E A T S R K V D  
UniRef90\_A0B0Y7 G F K C P S C A F K T L E F C E N G A K A L A V I E A T K K R V T  
UniRef90\_F2JWR7 H R I C P L C S T C G L L V I E L D G R S I V R V A P N P D D V M S A G H S C  
UniRef90\_A0A023D2N5 C R F C H A C A I L V I E T E G D R V V S G D T E D P V T C I K G R  
UniRef90\_M2W833 C S A H C G V L A T V V E G K L V K V T G D P N P Y T C A K G R  
UniRef90\_W9BRN4 I C P L C A T C G L T L T I E G T V T G A R G D R D I F S R G F I C  
UniRef90\_G8RS35 E G F D C P G C A W S S F E F C E N G A K A V S W E A T S K H T V T E L W G R  
UniRef90\_NOCKL4 E G F D C P G C A W S S F E F C E N G A K A V S W E A T S K H T V T E L W G R  
UniRef90\_D4GEI4 G F D C P G C A W H V A E F C E N G A K A V A E E A T T R R I T  
UniRef90\_E4P6U4 G F D C P G C A W G L A L D L C E N G K H T T W E M T T R E F F A S H S V T  
UniRef90\_UPI0003F4ACF5 D G F M C V S C S W H T F E F C E S G A K A T A W D T T A K R M T P E F L L N  
UniRef90\_UPI0004782867 H P S C C M L C G M N C L E L L A E D N K I I K V K P M Q D N P R S K G Y I C  
UniRef90\_B2JRW4 G F K C P S C A F K T L E F C E N G A K A L A V I E A T K K R V T R  
UniRef90\_UPI00046E829A E G F D C P G C A W A S F D I C E N G A K A I A W E V T D K Q V N A S F F A E  
UniRef90\_A8ZX26 K A I P V N C H V C N I Q A Y V E N D R V V K L E G N P E H V S T R G R L C  
UniRef90\_UPI000429C03A S G Y N C Y C T I Q G Y K R D G Q I V Y I E P L P E D P A N H A C Q R  
UniRef90\_E6SGB9 G F D C P G C A W S S F E F C E N G A K A V T W E A T S K R T T P E F F A Q  
UniRef90\_Q83RF3 D G F D C P G C A W G S F E F C E N G V K A V A W E A T D K R V G P S F F A R  
UniRef90\_C4ZIN2 A D G F D C P G C A W H S A E F C E N G A K A V A W E A T R K R V P R A F  
UniRef90\_C7N5H8 D G F D C P G C A W K I A E F C E N G A K A V R V R P S F F E E H S I E E L R  
UniRef90\_B7QY50 D G F D C P G C A W S T F E F C E N G V K A V A E A T S K R A T P A F F A A  
UniRef90\_UPI00047E7E95 A D G F D C P G C A W S A F E F C E N G A K A V A W E A T K K R C D P A F F A K  
UniRef90\_V5SAT8 G F D C P G C A W A A F E F C E N G A K A V A W E S T S R T V G A  
UniRef90\_R1GFA5 G F D C P G C A W G L K L I C E N G K H V A W E M T H K A A H T V S E L A  
UniRef90\_UPI000376FCB0 K Y I P T F C G M C V A I A R N V D G K V V K L D P N P L F T K S R N F L C  
UniRef90\_UPI000464886C A D G F D C P G C A W G S F E F C E N G V K A V A W E A T R A R V T P E F F A K  
UniRef90\_C5AIL8 E G F D C P G C A W S S F E F C E N G A K A I T W E S T A K R T H S R S E L W  
UniRef90\_I0IEY1 D G I D C P G C A W K K I E F C E N G A K A L A E E N T T R V A T P Q W W A D  
UniRef90\_UPI00036E16A K A V P S A C Y Q C V T R C Y V I E D G R V V K T E G Q L K S I R S E G V M C  
UniRef90\_A4WMJ9 C T R C Y D T C I F H V V R D G E I R L V P I S D F P F T C A R G M  
UniRef90\_C7QAY3 G F D C P G C A W N G A K A V A E A T L R R I T P E F F A E N S V A E L G  
UniRef90\_D4BTF3 D G F D C P G C A W A S F D I C E N G A K A I A W E A T S K K T P E F L L E  
UniRef90\_M5EIS8 M Y N I V K Q D G Q D V H I V P D K D C E V N S G L G S  
UniRef90\_J0L3Z3 C T Y C G V G C I S A E V S N D K I S K I Y S K S E T E V S R G D L C  
UniRef90\_W7SFH7 E G F D C P G C A W N G A K A V A E A T V R R V T P E F F A R H S V A E L A  
UniRef90\_UPI00034891BE D G F D C P G C A W S T F E F C E N G A K A I A E S T A R R A T P A L I A Q  
UniRef90\_W8HGG9 H S F C R I C I N H C S I L V D V I E D G V A T A V H G N S R N Q V T C V K G R  
UniRef90\_V3TSE0 N N C T Y C S V G C G V L M Y S L G D G S I Y H L E G D P D H P V S R G S L C  
UniRef90\_I0KBW3 D G F D C S S C A W N G A K A T A S D A D T R R A D P D F F A K H S L V D L S  
UniRef90\_B4SKD4 D G F M C V S C S W H P F E F C E N G A K A T A W E T D F F A A H P L A E L R  
UniRef90\_W3RSJ6 D G F D C P G C A W S T F E F C E N G V K A V A E A T T K A N T T E A L M K  
UniRef90\_W6X065 D G F D C P G C A W S T F E F C E N G V K A V A E A T T K A N T T E A L M K  
UniRef90\_Q3AAD3 D G F D C P G C A W S T F E F C E N G A K A V A A E S T A R R A G P E F F A S  
UniRef90\_Q5GZ28 N H S I C G Y C S W G C V Q I T E T K K N K V A R F V G D E T N D N E G N L C  
UniRef90\_UPI00036D0224 G F D C P G C A W K G L K L D I C E N G I K H V T W E L T H K R A G R E L F  
UniRef90\_UPI000371817E K T V C S Y C G T G C L T L G V K D N K V L T T I Y D E N Q G F H N G S Q L C  
UniRef90\_D7AE91 D G F A C V S C A W R A L E F C E N G A K A T A W E P A F F A K H T L S E L R  
UniRef90\_UPI000423D59D T M C Q G C A W C A V Q V Y I I N G R A T K V R G N P H A K A N H G H S C  
UniRef90\_Q5Y816 G V D C P G C A W P D P K H R H R N E Y C E  
UniRef90\_UPI0004742D98 G F D C P G C A W A P M E L C E N G V K A V S W E T T S K K A S P E F F S R  
UniRef90\_UPI0003C7E263 G F M C V S C A W G A F E F C E N G A K A T L W E P E F F A G H T V S E L R  
UniRef90\_A0A023V2Q6 I K P D Q D C V V N S G R G A  
UniRef90\_X2NFQ8 D G F D C S S C A W S V A E F C E N G A K A T A S D V D D R S A G P E F F A K  
UniRef90\_J8W1X3 F R E H P V S E L A R  
UniRef90\_Q1QFI6  
UniRef90\_UPI0003B668ED  
UniRef90\_M3E3X0  
UniRef90\_D6KALO

UniRef90\_R7XV69 P K G V A I A D 50 60 70 80 I H T D P D R L R R P V R R D R A T G E F H E  
UniRef90\_B5IF98 P K P K W L Y S K E R V K T P L N R K G K K P S L S F N P  
UniRef90\_U2M8B0 S R T K W V Y H Q Q R V T T P L L R V G K K G E G K F E P  
UniRef90\_F0M2V7 S E Y W L G M Q G R L T E P V I Y K P A G E D H Y R P  
UniRef90\_G8WDL8 N T V T S L L A R S D F E L E G Y G R L T Q P L A Y D K A S D T L R P  
UniRef90\_W0HXp8 A A P E L V D S S E R L R Y P L D Y F L E Y Q G R L T E P L R Y N A E S D K Y L P  
UniRef90\_W0HXs2 H T V S Q L Y Q S S Q S D Y F L E Y Q G R L T E P L R Y N A E S D K Y L P  
UniRef90\_D9WEZ7 P K G A S F G D P D R L R A P L V R R D G Q L R E  
UniRef90\_U3U9N9 Q K S N Y L E Y Q G R L T H P M Y Y N N K T H Y E S  
UniRef90\_W9BH80 A D F F A R H S V A E L D K P E Y W L S Q Q G R L T E P M V L R P G A T H Y E P  
UniRef90\_I4A7L9 S A V Q I L N D P H R V N Y P L K R V G K R G E G K W E R  
UniRef90\_Q24N20 S W K G E I Y A E D R I T Y P M K R V G G G K G F G K G H F E R  
UniRef90\_F5YSK5 N K A L R L D A N D R L T K P L R R R D D G T F E E  
UniRef90\_D0WIN8 D R F F A Q Y S V R Q L K Q T D Y W L E Y Q G R L A E P M R Y N A A T D H Y E P  
UniRef90\_A0KWD4 A A F M K E H S V S W L T Q S D Y F L E Y Q G R L T E P M R Y N P E T D H Y E A  
UniRef90\_X7E7C5 A E F M A Q H S V S W L T Q S D Y F L E Y Q G R L T E P M R Y N P A T D H Y E A  
UniRef90\_F6CU45 H T V S E L L T W S D H Q I E D L G R L T E P M A Y D P A D D R Y K A  
UniRef90\_B8H4C9 A A F F E Q Y S V S W L K Q S D Y F L E Y Q G R L A E P M R Y N A E T D H Y E P  
UniRef90\_F0LX46 R D F F A Q Y S V T E L M Q S D Y W L E E Q G R L T E P M R Y D A A T D H Y V P  
UniRef90\_K5YPY8 E K A M R L N G P H R L T S P L K R Q P D G T Y R E  
UniRef90\_U5E3G6 N T V T S L L E K S D Y E L E N Y G R L T Q P L S Y D R A T D T L R P  
UniRef90\_W0PIX0 K S D F E L E G Y G R L T Y P L E Y H H A S D T F R P  
UniRef90\_A4WBD6 A K G Y H V Y H P E R I L H P L R Q S S R G S G D W Q R  
UniRef90\_B8FTZ6 A K L H T I E T S R L L R P Q I K Q D G K F N T  
UniRef90\_D5V5N2 Q Q S D Y L E A H G R L T H P M R Y D A A T D R Y V Q  
UniRef90\_UPI00037A5144 A K I R R Y P G R L L A S P H R I R E P W L R S G E G F R P  
UniRef90\_UPI00046D6367 I K H E F I H S A E R L K T P L I K K D G A F H P  
UniRef90\_I3IP17 E Q S D F L E Q H G R L T D P M V Y D A Q T D R Y V P  
UniRef90\_A0B0Y7 S E F F E K H S V S W L K Q S D Y F L E Y Q G R L T E P M R Y N P K T D H Y E P  
UniRef90\_F2JWR7 A F F A Q H T V T A L M A Q S D Y W L E E Q G R L T E P M R Y E P E T D R Y V P  
UniRef90\_A0A023D2N5 A K G L G L G D P D R I R T P L L R T G G G G F R E  
UniRef90\_M2W833 Q L P E A H H H P E R L L S S Q K K T P Q G F E P  
UniRef90\_W9BRN4 A L P E L H N N P H R L L H S Q K R Q P D G T Y G P  
UniRef90\_G8RS35 P K G A S F G D P D R L R V P L V R G E D G E L R E  
UniRef90\_NOCKL4 N A H E L E G E G R L T H P M K Y D P A S D T Y Q  
UniRef90\_D4GEI4  
UniRef90\_E4P6U4  
UniRef90\_UPI0003F4ACF5 R E F F A A H T V D E L E R S D H W L G Q Q G R L T E P M L R R P G A A H Y E P  
UniRef90\_UPI0004782867 S L F D W L E A E G R L T E P M L Y D P G T D H Y V P  
UniRef90\_B2JRW4 W H D H D L E E A G R L T A P M K Y D A A T D R Y T E  
UniRef90\_UPI00046E829A  
UniRef90\_A8ZX26 R K G M Y Q H H S S R L T H P L K K S E Q G F E V  
UniRef90\_UPI000429C03A A F F E Q H T V T E L M A Q S D Y W L E E Q G R L T E P M R Y D A A T D R Y V P  
UniRef90\_E6SGB9 N T V Q S L L T W G D H E L E A A G R L T Q P L K Y D A V S D Y K P  
UniRef90\_Q83RF3 A K M W Y S Y D P D R I L Y P L K R V G A R G E G K W K R  
UniRef90\_C4ZIN2 C M S W S R H A T D R V M Y P M K R K E G T E R G A G E W E R  
UniRef90\_C7N5H8  
UniRef90\_B7QY50  
UniRef90\_UPI00047E7E95 H T L H A L E D Q G R L T H P M A Y D A V Q D K Y L P  
UniRef90\_V5SAT8 H T V Y E L E R Q G R L T H P L R Y D A A S D T Y L P  
UniRef90\_R1GFA5  
UniRef90\_UPI000376FCB0 F A E N S I D D L A R I T S E F E L G K L G R L T E P M L L R A G A S H Y E P  
UniRef90\_UPI000464886C G K T Y W L G Q Q G R I T H P M V L R A G A S H Y V P  
UniRef90\_C5AIL8 H T V T A L L D Q S D Y E L E Q H G R L T D P M V Y D A A S D R Y V P  
UniRef90\_I0IEY1 H T V H Q L E A V G R L T R P M R Y D A A T D R Y E E  
UniRef90\_UPI00036FC64C E F F R T H S R A A L W A K S D Y W L E E Q G R L A E P V R Y D P K T D H F E P  
UniRef90\_UPI00047CBF00 T W S F A L E D A G R L T E P M V I Y D E A S D R Y V P  
UniRef90\_B9L6C0 A R G N A G Y D P D R L K W P L I R V G K R G E G K Y R K  
UniRef90\_UPI0002557DBC H S V Y D L E H Q G R L T Q P M R Y N P E T D H Y E A  
UniRef90\_W4MC12 E A R F V R  
UniRef90\_C6B711 T W T D H L E D A G R L T L P L W Y D Q G T D H F E Q  
UniRef90\_UPI0003B416BC H S I Y W L G Q S G R I T H P M V I R E G E T H Y S P  
UniRef90\_UPI00036E16A A K G Q G G N D P D R I L Y P L K R V G K R G E G K W K Q  
UniRef90\_A4WMJ9 A D V R R L N S P R R I K T P L L R G E R Q V V E  
UniRef90\_C7QAY3 G R G Y W L G Q Q G R L T T P M L L D E G A T H Y R P  
UniRef90\_D4BTF3 W D D F H L E D E G R L T H P M K Y N S Q T D K Y E P  
UniRef90\_M5EIS8 V R G A R M G E L R Y S T A R G S Q Q Q R L T S P M V W R Y G Q M Q P  
UniRef90\_J0L3Z3 L K F G F L S S G N R L S G A F I K K E F V Q K N I D L I A D L N F V D E V E  
UniRef90\_W7SFH7 E K T Y W L G K Q G R L T E P M V L R E G A S H Y E P  
UniRef90\_UPI00034891BE H T V Q W L T Q Q S D H W L E G Q G R L T E P M R Y D R A S D R Y Q A  
UniRef90\_W8HGG9 S Q H E Y L R H S D R L V H S L V R T P E G H V R  
UniRef90\_V3TSE0 G L I D F I H S A Q R L L Q Y P Q Y R A P G S D K W Q R  
UniRef90\_I0KBW3 N M T D R L N N S P R L T H P L V R R P G D T H Y R Q  
UniRef90\_B4SKD4 Y W L E M Q G R L T E P M R Y D A S T D H Y V P  
UniRef90\_W3RSJ6 T W S H R L E A E G R L T E P M V Y D A A T D R Y V P  
UniRef90\_W6X065 Q T D Y E L E Q H G R L T E P M V Y D P M T D T Y E P  
UniRef90\_Q3AAD3  
UniRef90\_Q5GZ28 H S V Y W L E G Q G R L T H P M R Y D A A T D H Y V P  
UniRef90\_UPI00036D0224 A K G R F V H N E N R L K S P L M N I G G T F K E  
UniRef90\_UPI000371817E A R H T V S E M H E W S D Y E L E D Q G R L T E P M V Y D A A T D H Y V P  
UniRef90\_D7AE91 T R G R W V N S S K R L T T P L I R K G D T L Q P  
UniRef90\_UPI000423D59D G W A D Y L E Q Q G R L T H P L R Y D A Q S D R Y R E  
UniRef90\_Q5Y816 V R S H Q V Y D P D R V K Q P M K R T N P K K G R D E D P G F I P  
UniRef90\_UPI0004742D98 N G A K H I N D E S R V T R S D L W L N Q Q G R L T E P M V K R P G A T H Y E P  
UniRef90\_UPI0003C7E263 H P V S T L W H Y S D Y E L E N I G R L T H P M K Y D A A S D T W Q A  
UniRef90\_X2NFQ8  
UniRef90\_J8W1X3 T W K D Y L E Q Q G R L T H P M R Y E A S S D T Y V A  
UniRef90\_Q1QFI6 R I A E M S Y S Q A R N T Q L Q R L T D P M V W R Y G Q M Q P  
UniRef90\_UPI0003B668ED H T L A E L N N T G R L T H P L V K R P G S D Y T R  
UniRef90\_M3E3X0 R S D K W L N D Q G R L T E P M V K R P D S D H Y E P  
UniRef90\_D6KALO Y W L G Q Q G R L T H P M Y L P E G A D H Y E P

UniRef90\_R7XV69 UniRef90\_B5IF98 UniRef90\_U2M8B0 UniRef90\_F0M2V7 UniRef90\_G8WDL8 UniRef90\_W0HXP8 UniRef90\_W0HX52 UniRef90\_D9WEZ7 UniRef90\_U3U9N9 UniRef90\_W9BH80 UniRef90\_I4A7L9 UniRef90\_Q24N20 UniRef90\_F5YSK5 UniRef90\_D0WIN8 UniRef90\_A0KWD4 UniRef90\_X7E7C5 UniRef90\_F6CU45 UniRef90\_B8H4C9 UniRef90\_F0LX46 UniRef90\_K5YPY8 UniRef90\_U5E3G6 UniRef90\_W0PIX0 UniRef90\_A4WBD6 UniRef90\_B8FTZ6 UniRef90\_D5V5N2 UniRef90\_UPI00037A5144 UniRef90\_UPI00046D6367 UniRef90\_I3IP17 UniRef90\_A0B0Y7 UniRef90\_F2JWR7 UniRef90\_A0A023D2N5 UniRef90\_M2W833 UniRef90\_W9BRN4 UniRef90\_G8RS35 UniRef90\_N0CKL4 UniRef90\_D4GEI4 UniRef90\_E4P6U4 UniRef90\_UPI0003F4ACF5 UniRef90\_UPI0004782867 UniRef90\_B2JRW4 UniRef90\_UPI00046E829A UniRef90\_A8ZX26 UniRef90\_UPI000429C03A UniRef90\_E6SGB9 UniRef90\_Q83RF3 UniRef90\_C4ZIN2 UniRef90\_C7N5H8 UniRef90\_B7QY50 UniRef90\_UPI00047E7E95 UniRef90\_V5SAT8 UniRef90\_R1GFA5 UniRef90\_UPI000376FCB0 UniRef90\_UPI000464886C UniRef90\_C5AIL8 UniRef90\_I0IEY1 UniRef90\_UPI00036FC64C UniRef90\_UPI00047CBF00 UniRef90\_B9L6C0 UniRef90\_UPI0002557DBC UniRef90\_W4MC12 UniRef90\_C6B711 UniRef90\_UPI0003B416BC UniRef90\_UPI00036E16A UniRef90\_A4WMJ9 UniRef90\_C7QAY3 UniRef90\_D4BTF3 UniRef90\_UPI0003M5EIS8 UniRef90\_J0L3Z3 UniRef90\_W7SFFH7 UniRef90\_UPI00034891BE UniRef90\_W8HGG9 UniRef90\_V3TSE0 UniRef90\_I0KBW3 UniRef90\_B4SKD4 UniRef90\_W3RSJ6 UniRef90\_W6X065 UniRef90\_Q3AAD3 UniRef90\_Q5GZ28 UniRef90\_UPI00036D0224 UniRef90\_UPI000371817E UniRef90\_D7AE91 UniRef90\_UPI000423D59D UniRef90\_Q5Y816 UniRef90\_UPI0004742D98 UniRef90\_UPI0003C7E263 UniRef90\_A0A023V2Q6 UniRef90\_X2NFQ8 UniRef90\_J8W1X3 UniRef90\_Q1QFI6 UniRef90\_UPI0003B668ED UniRef90\_M3E3X0 UniRef90\_D6KALO

90 100 110 120

LGWTEALELVSSGLAATINAHGRDALL 110 GYLG N P N  
TSWDNAMSIIAKKIKRTIKGYGESSVLLLYYYGDRG  
ITWQQALDLIAEKNIKRTSLKKEQGNELLLSTHAGNMDNSAKN  
IIVS WDEAFSLIAEDKILRTSLPS PD QAAFYVTSGRASNEAAAF  
VSWDAAFSTRIGALRLTLQ PNEVEFFYTSGRASNEAAAF  
ILSWDEAFALAGQMAAIKARS GAHAF AFT PS GT PLSDSDID  
ILRWEDAFALIAANHLQDLAHPDQLELYTSGRASNEAASY  
ASWEFAFAAV AEGFGEVLRDHP NQLELYTSGRTSNEAAAF  
IISWDNAFYTLVIADESKHLKAMDHP NQLELYTSGRTSNEAAAF  
IISWDEAMDTIEKRLKEYKKNFGGESVVFYTSGRGTNQWN  
IISWDEALDTIESEKIRRETLEKYG DASILHTHHSFFTLSSFP  
IVEWDAALTEIISQRRLTRLRDEHGGESIFYYGGGGQGNHLGG  
IISWEAYRYIADESLIRIQDITYGLDSDVFPGYVASLFGNWD  
IISWDGAFGLIADTLNGLSD PNDNQVEFFYTSGRASNEAASY  
IISWDDAYT QIADSLRLSD QDN PNDNVAFFYTSGRASNEAAAF  
IISWTQAFS QIANALNSQNS PNDNAFFYTSGRASNEAAAF  
IIPWDEAFSRA GAALKALSD PPNQAEEFYTSGRASNEAAAF  
IISWDDAFALVATHLNQLLEH PPNQAEEFYTSGRASNEAAAF  
VSWDDAYRLIASELNALAS PD EAEFFYTSGRASNEAAAF  
IISWDTALDDEITARLVALRAAHGGESIFYYGGGGQGNHLGS  
VSWWEAFDRIGT VLRGLS P NQTEFFYTSGRASNEAAY  
VEWEHAFARIGE VLRDL PA DAVIEFFYTSGRASNEAAY  
ITWTEALGIEARQIVQIYNRHNHLPLGLLDGKANTGVLA  
IISWDTSFKGLYISSKIKRRLYKSEPERVVFYLSGQLTTEIDY  
VSWDEAFKLMADHLNLA LPD PD PQA AFYTSGRASNEAAAF  
ASWEALDLVYCGELERQVRRDD P R GNTLGLWVRGAGSMGVSK  
SSWDDALEYIISKRFRQIINEYGGESIFYYGGGGQGNHLGS  
IISWDDAFALYIARHLRALPLP PNDNAFFYTSGRASNEAAAF  
IISWDEASQ QIAAKKLSLDSP PNEAAFFYTSGRASNEAAAF  
IISWDDAYA MI GAHLRALDHP DEAEFFYTSGRASNEAAAF  
ATWAEAFEIERRLPEFVLTGDP GSCATYHGNPAAHHLDATF  
IATQTALDEIATARKLPLIDEDHGGPDSVAIYAGTYAFQNSAG  
IGAERAMDEIATARKLPLIDEDHGGPDSVAIYAGTYAFQNSAG  
ATWDEAFDRIPALAEAHGPQAVVA LYGTVLGNPN  
IAWETAFAFNEIGERLRSYQD PD SVEFFYTSGRASNEAAAF

VGWDDAFALLLASELNALRS PD EAVFFYTSGRASNEAAAF  
ISWADDAFKLF GD SVRALLES PDQAAYYTSGRGLGNEASF  
VSWEEAFREIIGRELGALD PESVVFYASGRASLETSY

IISWGQAYREIISERKLA VTEQYGP KSFAYLGGGGQA CHFEA  
VTWDDAYAMI GRHLRALKTD PNEAEFFYTSGRASNEAAAF  
VAWDEALELVAERIRATVQRD PDRLYFYMTSGRGM PNEAAYF  
LSWQQAFDEIIGARLQASYSD PNDQVEFFYTSGRASNEAAAF  
ITWEEALTEIVAGARKLDAALKE DPNTMLMLKYGRNRTGTIDR  
IISWDEALDLVGDKNLNAVLA KDP KAASFYIF TGNMNTLSWF

VSWDEAATRIG GAALRALPE PTMAEFFYASGRASNEAAAF  
VSWEHAFTEIIGGLKGLDSPH RAEFFYTSGRASNEAAY

VGWDFAFHVVARHLKALAD PNDAVFFYTSGRASNEAAAF  
IISWPAAFT MIADLKAALDSD PDEALFFYTSGRASNEAAY  
IAWDDAFTLIARHLKALDLD PNRRAAFYTSGRASNEAAAF  
IISWDDAYRRVIGRGLAGLSDPD PDRGVFFYTSGRASNEAAAF  
VSWDEALEIIGAGLNALLEH PD QAEEFFYTSGRASNEAAAF  
IISWQAFQLVGRTRVRLGLD D PDRRAAFYTSGRASNEAASF  
ATWEEAYEYIRQKMLKIDDEE KDNRSALAFGAGAGAE PL  
VSWQEA FD GIATALNALDHP NQAEFFYTSGRASNEAAAF  
VSWDEALDEIAGREKQI IAGVGP AALLPYSYMGNHG VL  
IASWDAFALIAAEVNLKLD PD QAEEFFYTSGRASNEAAAF  
IISWMEAFDVI AAEVNLKLD PD PDRCTFFYTSGRASNETAF  
IISWDEALGELLAGRLKALMDK GEPKVMFYGRMKSSTSK  
ASWGRALGELLAGRAR IKAEDPQRVIHLDYDGN

VTWDEA FGVI AEE LAALDSD PDEAVFFYTSGRASNEAAAF  
IIEWEEA FQQIGTRLQYSYSDPNTVEFFYTSGRASNEAAAF  
TSWDDALDLVIA RVTA AVVKDQGEDGLFVSVV F HGGSAAGGY

IQENTFYRIPIYS DGYKIVARKFKELLN RKEKSVASLGGAR  
IISWDDAFSLV GGALRLD D PND EALFFYTSGRASNEAAAF  
IISWDEAFALI AARNALPT PD DALFFYTSGRASNEAAAF  
LPAEKAMDEIAAKLADLRDRHGP RSTIASYAGTMAHITTA P  
IISWDEALDRISRLMKEDRDANGVT VNRWPTTGM L C SSAAS  
IIEWTEAFQLVASELNALPS PD EAVFFYTSGRASNEAAY  
CSWDEAFALIGRHLQALDSDPH QAEEFFYTSGRASNETAF  
VSWQQAFAIIGAELRQLD P QS VVFYTSGRASLETASY  
IENWNAFAALIAGHLNKLAS PH EAAFFYTSGRASNEAAY

VSWDDAFALQIAGHLVLTGLATPD EAVFFYTSGRASNEAAAF  
VSWGEALQTI VDRVGLATNRS GSE TVAGLGGKRTSNEASY  
IISWHDAFELV GRHLRNLJEN P NQASYYTSGRGLGNEATF  
ASWDEALGMVADR LKTSKD AAATLVITPRL  
TSWEEAYRDI GAQLKGLPE DSVVFYASGRASLETSF  
IISWEAMDTIADKIME LRDNNET HKFSVWRG  
ATWSDALKLYAGLTKRILDLADG P SALAFD C D HGGGGGGF  
IISWDDALGLV ADELRLGLDSD PDEAMFFYTSGRASNEAAAF  
VDWDIA FHEIGERLRSYDSA EQVEFFYTSGRASNEAAAF

CSWDEAFAAIIGRELKALD P GSAVFFYASGRASLETSY  
TGWDEALDLV ARVTVAVI NDMGE DGLFVISA YDHGGAGGGY  
IIEWPEVFI VADLNLALAS PD EAVFFYTSGRASNETAF  
IISWDDAFGLLAQELNLLDSD PDEAEFFYTSGRASNEAAAF  
VTWERAFDILV AEEI AALAS PDEAVFFYTSGRASNEAAAF

UniRef90\_R7XV69 UniRef90\_B5IF98 UniRef90\_U2M8B0 UniRef90\_F0M2V7 UniRef90\_G8WDL8 UniRef90\_W0HXp8 UniRef90\_W0HXs2 UniRef90\_D9WEZ7 UniRef90\_U3U9N9 UniRef90\_W9BH80 UniRef90\_I4A7L9 UniRef90\_Q24N20 UniRef90\_F5YSK5 UniRef90\_D0WIN8 UniRef90\_A0KWD4 UniRef90\_X7E7C5 UniRef90\_F6CU45 UniRef90\_B8H4C9 UniRef90\_F0LX46 UniRef90\_K5YPY8 UniRef90\_U5E3G6 UniRef90\_W0PIX0 UniRef90\_A4WBD6 UniRef90\_B8FTZ6 UniRef90\_D5V5N2 UniRef90\_UPI00037A5144 UniRef90\_UPI00046D6367 UniRef90\_I3IP17 UniRef90\_A0B0Y7 UniRef90\_F2JWR7 UniRef90\_A0A023D2N5 UniRef90\_M2W833 UniRef90\_W9BRN4 UniRef90\_G8RS35 UniRef90\_N0CKL4 UniRef90\_D4GEI4 UniRef90\_E4P6U4 UniRef90\_UPI0003F4ACF5 UniRef90\_UPI0004782867 UniRef90\_B2JRW4 UniRef90\_UPI00046E829A UniRef90\_A8ZX26 UniRef90\_UPI000429C03A UniRef90\_E6SGB9 UniRef90\_Q83RF3 UniRef90\_C4ZIN2 UniRef90\_C7N5H8 UniRef90\_B7QY50 UniRef90\_UPI00047E7E95 UniRef90\_V5SAT8 UniRef90\_R1GFA5 UniRef90\_UPI000376FCB0 UniRef90\_UPI000464886C UniRef90\_C5AIL8 UniRef90\_I0IEY1 UniRef90\_UPI00036FC64C UniRef90\_UPI00047CBF00 UniRef90\_B9L6C0 UniRef90\_UPI0002557DBC UniRef90\_W4MC12 UniRef90\_C6B711 UniRef90\_UPI0003B416BC UniRef90\_UPI00036E16A UniRef90\_A4WMJ9 UniRef90\_C7QAY3 UniRef90\_D4BTF3 UniRef90\_U5EIS8 UniRef90\_J0L3Z3 UniRef90\_W7SFH7 UniRef90\_UPI00034891BE UniRef90\_W8HGG9 UniRef90\_V3TSE0 UniRef90\_I0KBW3 UniRef90\_B4SKD4 UniRef90\_W3RSJ6 UniRef90\_W6X065 UniRef90\_Q3AAD3 UniRef90\_Q5GZ28 UniRef90\_UPI00036D0224 UniRef90\_UPI000371817E UniRef90\_D7AE91 UniRef90\_UPI000423D59D UniRef90\_Q5Y816 UniRef90\_UPI0004742D98 UniRef90\_UPI0003C7E263 UniRef90\_A0A023V2Q6 UniRef90\_X2NFQ8 UniRef90\_J8W1X3 UniRef90\_Q1QFI6 UniRef90\_UPI0003B668ED UniRef90\_M3E3X0 UniRef90\_D6KALO

V H S L G S M T H G I G L V K A L R T R N T F S A T S V D Q L P H Q L L A H L M  
F V N A N F P H R L F N Y I N A S I T E D T I C D R S G E E A L K D I  
D M G K A F F D Y L G G S V K Q A G S L C C S A V T A A M M P M  
L Y Q L F R G Y G T N N L P D C S N M C H E S S G W A M G Q T I  
L F Q L F A R E Y G T N N F P D C S N M C H E S T S V G L P Q S I  
W L E R L L C Y A T E L C N W H K D V A H T F T F G C G M P T A D Y P H S D L I  
L Y Q L F G R M F G T N N F P D C S N M C H E A S G S G L K Q S I  
V H T V A G A L F V P V L L G A L R T R N V F T A S T L D Q M P K H V S S G L M  
L Y Q L F G R L I G T N N F P D C S N M C H E A S S I A L Q E S I  
L Y Q L L V R S F G T N N F P D C S N M C H E S S G T A L V D S I  
H T P Y V G G G I A G W S D Q S T S G H T A A E K F F L G Y D M V P T A I F G I  
A Y A P A T M A A Y G A R F R S S A L A Q E K T G E F W V A  
I G R L F A L R G G Y L E H W G A C S S G A W G S L A K V Y  
L Y Q L F G R L Y G T N N F P D C S N M C H E A S G V A L N Q A I  
L Y Q L F R A Y G T N N F P D C S N M C H E A S G Y G L T S S I  
L Y Q L F A R A Y G T N N F P D C S N M C H E A S G Y G L T S S I  
L Y Q L L G R R F G T N N F P D C S N M C H E P T S V G L P D S I  
L Y Q L F A R R F G T N N F P D C S N M C H E A T S V A L A R T I  
L Y S V F V R E F G T N N F P D C S N M C H E P T S R G L P M S I  
A N A L A L R G A L G S V Y H S N A L A Q E K T G E I P W I D  
L F Q L F A R E Y G T N N F P D C S N M C H E A T S V G L P R S I  
L F Q L F A R E L G T N N F P D C S N M C H E A T S V G L P R S I  
R S L S G M L S A M A P I T E R G P Q S S G P G M D A Q F L D  
I A N K L A K G F I N T N N V D T N S R T C M A S A V V A H K K A F  
M Y Q L F V R R Y G T N N F P D C S N M C H E P T S I G L P E T V  
G A L D Y L M T A L G A R G T R G A L C D G A G I A A V E A D  
L F Q K F C R S V L R T N T I D N L S N L R S P S L N S L M Y E S V I R G I A S  
L Y Q L F V R L Y G T N N F P D C S N M C H E A T S R G L P A S V  
L Y Q L F V R A Y G T N N F P D C S N M C H E A S G Y A L T G S I  
L Y S I F V R Q Y G T N N F P D C S N M C H E P T S R G L P H A I  
Y L I G E L I G A V G T R N V Y S P A S V D T W P K N L A H M L L Y  
V A S A M A F A Q G L G T R H F Y T S V T L D Q P K V Y T A A  
A S A L M A N A F I R A I E S P M F F T A N T I D Q P G K Q I A L A A H G H W L  
V H T M A G S L Y T P L L L A A L R T R N V F T A S T L D Q M P K H V S S G L L  
L W Q L F A R E F G T N N F P D C S N M C H E P T S V G L P E S I  
A Y Q L F V R E F G T N N M P D C S N M C H E S S G S A L T E T L  
L Y Q L M A R E L G T N N Q P D C A N M C T E A G S R A M I A S L  
M Y Q L F A R M Y G C N N L P D S S N M C H E S T S V G L K E A I  
F L G L Q L M H S L G S K Y H Y S A L G Q E L T G H F W V Y G R A  
L Y S I F V R A Y G T N N F P D C S N M C H E P T S R G L P H A I  
A F Q K V A R F L G T N N I D N A A R I C H A P S T W A L A K T I  
L Y Q L F A R E Y G S N N F P D C S N M C H E P T S V G L A A S I  
F M K T L G S A T V L N H T S V C E S S K K V G Q E  
A P A R M A H C L G T T T W S M E G I M G D H A T S I G Y T M V T G N P D P G H  
L Y Q L F A R E Y G C N N F P D C S N M C H E A S S V G L P E A I  
L Y Q L F V R L Y G T N N F P D C S N M C H E A S G I A L E Q A V  
L Y Q L F V R A Y G T N N L P D C S N M C H E S S G T A L T R V I  
L Y Q L L V R S Y G T N N L P D C S N M C H E S S G T A L T D S L  
L Y Q L M V R R F G T N N F P D C S N M C H E A T S R G L P A S V  
L Y Q L L G R R L G T N N F P D C S N M C H E S S G V A M A S I  
L Y Q L F V R L Y G T N N F P D C S N M C H E A T S V G L P Q S I  
L Y Q L W V R E F G T N N L P D C S N L C H E A S G K A L H A S I  
F A T F G N G V G S A I F V D H F T T C F A P A F M A N  
L Y Q T F V R L F G T N N F P D C S N M C H E A S G V A L T Q A I  
Q S A S L D R R F A R L G A T R L E R N I C S D A G G Q G I L A T M  
L Y Q L F V R A Y G T N N F P D C S N M C H E A T S V G L P K S I  
M Y Q L L A R S L G T N N L P D C S N M C H E S S G T A L T P T I  
M V N T F L A V V G T G T I G D H T S I C E G G K W T A Q E  
Q G L L T W Y Y P A R L F G N A L G T A S T D Y S I C S A E G H E A I K L H W  
L Y Q A F V R S F G T N N L P D C S N M C H E S S G S A L N E T L  
L Y Q L L A R E Y G T N N F P D C S N M C H E P T S V G L A N S I  
E N T W G T G K L Y F G S M K V K N I R I H N R P A Y N S E V H A T R D M  
T S C E S G F L F Q K I T R E V F K S P H D C C A R V C H S P S L R G M R E T I  
A Y Q L L A R S L G T N N L P D C S N M C H E S S G S A L I Q T I  
L Y Q L F V R E F G T N N F P D C S N M C H E S S G A M R E A I  
T A A P L H N A L F D A L G S E M R F D P N T I D K G G K Q V A Q S  
N E T G M L D Q R F S R A L G M V G I D T Q A R L C H G P T V A A L A A T F  
L F Q L F V R Q F G T N N L P D C S N M C H E S S G S A L S P T L  
L Y S I F V R E F G T N N F P D C S N M C H E P T S R G L P P A I  
M Y Q L F G R M Y G S N N F P D S S N M C H E S T S V A L P E V I  
V Y Q L F V R M F G T N N F P D C S N M C H E A T S R G L P G T V  
L Y Q L F A R E F G T N N F P D C S N M C H E P S G T A L R S Q I  
L F Q K L F R G S Y G S N Q I T N L A N M R A P Y V N R F M V R C F  
L Y Q L M A R E L G T N N L P D C S N M C H E A S G R A L Q A S L  
T N E E L Y L K R G V V K D A V G S D N L D H S G G Y A H E A L T A G A R E S L  
M Y Q L F A R A Y G T N N L P D S S N M C H E S T S V G L Q E S I  
R Y T A L N G I L Y G N M P K I I G S P N N V I S H S S I C A E T E K H G R Y Y  
E N T W G T G K L M F S A L Q T P L V R I H N R P A Y N S E C H A T R E M  
L L Q L F V R A Y G T N N L P D C S N M C H E S S G S G L G E T L  
L Y Q L F A R E Y G S N N F P D C S N M C H G P T S T G L T Q A I  
L Y A L F A R L Y G H N N L P D S S N M C H E T T S V A L K K V I  
E N T W G T G K L Y F G A M K V K N I R I H N R P A Y N S E V H A T R D M  
L F Q L F A R Q F G T N N L P D C S N M C H E S S G S A L S P T L  
V L Q L F A R A F G T N N L P D C S N M C H E S S G H A L H E T L  
L Y Q L F A R E L G T N N L P D C S N M C H E S S G S A L S E T I

UniRef90\_R7XV69 F G H Q L L L P L P D I D R T T Y F L V F G A N P M A S N G S L M T V P D F P T  
UniRef90\_B5IF98 Y G T S Q G M D P E E L E N E N L I V Y W G I N A A W T N H G F Y L T K R L  
UniRef90\_U2M8B0 V G L R Y A D T S R D T F A K A D S R L I I C W G N N P A V T M Q A Y F K N Y L  
UniRef90\_F0M2V7 G V G K A T V S Y D D F A K A E L I I I M G Q N P G T N H P R M K I V A V N P L  
UniRef90\_G8WDL8 G I G K G T V S L D D F D K T E L V I S I G H N P G T N H P R M M G  
UniRef90\_W0HXP8 M L W G H N P A N T W L A Q A H A I G E G R R N G A R L L V I D P R E T A L A Q  
UniRef90\_W0HX52 G V G K G T V R L D D F E L A D A I F V F G Q N P G T N H P R M L H S L R H A A  
UniRef90\_D9WEZ7 F G D A F A I P V P D L D R T D H L M I G A N P L D S N G S L C T A P D F P G  
UniRef90\_U3U9N9 G V G K G T I R L D D F E N H A D A I F I F G Q N P G T N H P R M  
UniRef90\_W9BH80 G I G K G S V T V D D V E H A D L I V I A G Q N P G T N H P R M L S V  
UniRef90\_I4A7L9 F G M L P I W D G C D F E R S Q C M V F W G S N L V W T E A T I S  
UniRef90\_Q24N20 E D K F P G F E A P D L L N S N L L V L W G W D P L V G W H G T V  
UniRef90\_F5YSK5 A R M L G R P H R S D F E H C E V A V F V G K N P Y Q S H G F P R A R S V L K E  
UniRef90\_D0WIN8 G L A E D T N D R I D L R N A D L I V L W G S N P A W S R T G L P T Y  
UniRef90\_A0KWD4 G V G K G T V V L S D F D A A E A I F V F G Q N P G T N H P R M M N C K I V T F  
UniRef90\_X7E7C5 G I G K G T V E I E D F E R A D A V F V F G Q N P G T N H P R M L  
UniRef90\_F6CU45 G I G K G T I E I E D F E R A D A V F V F G Q N P G T N H P R M L  
UniRef90\_B8H4C9 G L G K G S V T L E D F D H A D L I L C F G H N P G T N H P R M M A  
UniRef90\_F0LX46 G I G K G T V T I D D F E E A D A I F I F G Q N P G T N H P R M  
UniRef90\_K5YPY8 G L G K G T V V I G D F A K A E A I F I I G Q N T G T N S P R M M T E L V H A R  
UniRef90\_U5E3G6 G R L Y G G H T K G D F E H A E L V F V G K N P W Q S H S F P R A R P V L K E  
UniRef90\_W0PIX0 G I G K G T V S L D D F D E T E L I I S I G H N P G T N H P R M M G T  
UniRef90\_A4WBD6 G I G K G T V S L D D F D N T E L V I S I G H N P G T N H P R M M G  
UniRef90\_B8FTZ6 F G R V R L K P P E D M K K A D L I I L W G V N P A A T A I H Q  
UniRef90\_D5V5N2 G V D Y V P V R M R D K K A N D L I L V G S N A E A H V V F F N  
UniRef90\_UPI00037A5144 G V G K G T V T L D D F D H C D T L I L F G Q N P A T N H P R M L G  
UniRef90\_UPI00046D6367 A G R L D M N D P L Q I D R A E A I V L W G K N P K A S S V H T  
UniRef90\_I3IP17 T S L K E I E H A N T V F F G T D M T E A H P V A G T M A R  
UniRef90\_A0B0Y7 G V G K G T V T L D D F E H A D T L L I F G Q N P A T N H P R M M G  
UniRef90\_F2JWR7 G I G K G T T T L E D F E H A D A V F V F G Q N P G T N H P R M L D  
UniRef90\_A0A023D2N5 G V G K G T I V M A D F D H A E A I F I F G Q N T G T N S P R M M T N P V V I V  
UniRef90\_M2W833 G T G L G L S L P D I D R T D Y L L V L G S N P M V S N G S T V T A P G M H A  
UniRef90\_W9BRN4 Q Y G S W A G G G H V F G E A D V A F I G N N P I V S H G P P G G L P P F S P  
UniRef90\_G8RS35 G G D I D F H E A D S W F I F I G T N P L I S K S I G I P G Q N P  
UniRef90\_NOCKL4 F G D A H A I P V P D L D R T D H L L I G A N P L E S N G S L C T A P D F P G  
UniRef90\_D4GEI4 G I G K G T V E L D D F D H C D L V I C I G H N P G T N H P R M L A  
UniRef90\_E4P6U4  
UniRef90\_UPI0003F4ACF5 G V G K G S V L L E D L H E A D L I F V V G Q N P G T N H P R M L S A  
UniRef90\_UPI0004782867 G T G K G T V D L K D W E A A D A V F V V G I N A A S N A P R M L T P L A Q L Y  
UniRef90\_B2JRW4 G V G V G T I T L E D F E K T D L M F F F G Q N V G T N S P R M  
UniRef90\_UPI00046E829A  
UniRef90\_A8ZX26 L G K Q N C W P A P D E A N S D M L I A I G W N A M E S H Q T P R A P L I M K E  
UniRef90\_UPI000429C03A G V G K G T I V M S D F D K A E I F I F G Q N T G T N S P R M M S N L V H A R  
UniRef90\_E6SGB9 G Y G A T T V S Y K D W I G C D L I V L V G T N L A N N Q P V T  
UniRef90\_Q83RF3 G V G K G T V L E D F E K C D L V I C I G H N P G T N H P R M L T S L R A L V  
UniRef90\_C4ZIN2 P T W G P D I E T P D F A N A K Y V L N F G S N I L E A A Y F H N P L S  
UniRef90\_C7N5H8 D A L D Y M N S N M M L F F G C N M A D N I A P S  
UniRef90\_B7QY50 G T T S G M V P E D I V H S R L I V L W G T N V V T N L H L  
UniRef90\_UPI00047E7E95 G V G K G T V Q L E D F E Q A D A V F C I G H N P G T N H P R M R G V P I V V L  
UniRef90\_V5SAT8 G I G K G T V T L E D F E K A D A I F V I G Q N P G T N H P R M L G D L R R A  
UniRef90\_R1GFA5  
UniRef90\_UPI000376FCB0 G S G K G A V T L E M L E E A E L I V V V G Q N P G T N A P R M L S H  
UniRef90\_UPI000464886C G T G K G S V T V D D V E N A D L I V I A G Q N P G T N H P R M L S  
UniRef90\_C5AIL8 G V G K G T V T L D D F E H A D L L I F G Q N P A T N H P R M L G  
UniRef90\_I0IEY1 G V G K G T V T L E D F G L A D M I L V I G Q N P G T N H P R M L T  
UniRef90\_UPI00036FC64C G I G K G T V S L E D F D H A D L I L S I G H N P G T N H P R M M A  
UniRef90\_UPI00047CBF00 G T P K G T V D L A D D W M A D A I L L L G N N A A S N A P R M L T  
UniRef90\_B9L6C0 K L T F G S W G S A N D F R M S K Y V L M L G A N R A E A I V T P D T  
UniRef90\_UPI0002557DBC G I G K G T V L L E D F E K A D L V F C V G Q N P G T N H P R M L A  
UniRef90\_W4MC12 G T T S G M V P E D I V H S R L I V L W G T N V V T N L H L  
UniRef90\_C6B711 G V G K G T V T L E D F D H A D A I F S F G H N P G T N H P R M M T  
UniRef90\_UPI0003B416BC G I G K G T V S L E D I E Q A E L V F V V G Q N P G T N H P R M L G S  
UniRef90\_UPI00036EE16A L T W G A H Y D S W D F D N T R F V L N F G S N V F E A G T N H V P T S  
UniRef90\_A4WMJ9 G R S Y G A M P E E L G R R P V V F W A L D A S T S F I H G  
UniRef90\_C7QAY3 G V G K G S V S L A D L G K A D L I L V V G Q N P G T N H P R M R I T A V N P L  
UniRef90\_D4BTF3 G V G K A T V L L D D F D K A D L V I C I G H N P G T N H P R M L S  
UniRef90\_M5EIS8 G V G E L N N C Y E D A E L A D T I V S V G N N P L E T Q T N Y F L N H W I P N  
UniRef90\_J0L3Z3 G E G A S T N P F R D L E N S E F I L I G S N T T E A H P I V  
UniRef90\_W7SFH7 G I G K G S V S L A D V T N A D L L V I V G Q N P G T N H P R M L S A  
UniRef90\_UPI00034891BE G V G K G T V Q L A D F Q L A D A L F I F G Q N P G T N H P R M L G E  
UniRef90\_W8HGG9 L L G Y W A A P P Q G F D A P E A V L L I G I N P M V T C T G F P A G S P  
UniRef90\_V3TSE0 G R G A M T N N W V D I K N A N I V L V M G G N P A E A H P V G F K W A  
UniRef90\_I0KBW3 G L G K G S V T L D D L H E A E V I L I M G Q N P G T N H P R M L T A  
UniRef90\_B4SKD4 G V G K G T I V L Q D F E H A E A I F V I G Q N T G T N S P R M M S N P I V A V  
UniRef90\_W3RSJ6 G A P V I G T V L L P D F D Q T D C I L F F G Q N T T T N S P R M  
UniRef90\_W6X065 G V G K G T V T L E D F E H A D T I I F G Q N P A T N H P R M L G  
UniRef90\_Q3AAD3  
UniRef90\_Q5GZ28 G V G K G T V S L H D F E L A D A I F I F G Q N P G T N H P R M L G E L R H A S  
UniRef90\_UPI00036D0224 E N G I N S K P V T E M E K S D V I F V F N S D L P S E Y P V G G N S A R K G  
UniRef90\_UPI000371817E G T G K G T V D L K D W E A T D A L F I I G V N V A S N A P R M L T  
UniRef90\_D7AE91 G F P G S P S V I A D I Q K S E L L V I K T D A Y E T H P V I G F E V N L A V  
UniRef90\_UPI000423D59D G V P I G T V T L D D F E H T D C L L F F G Q N V G S N S P R M L  
UniRef90\_Q5Y816 T E A Y W G Y A D Y D H E N A F Y E I L W G A D P I A S N R Q V P H T A S I F G  
UniRef90\_UPI0004742D98 G I G E L N N S Y E D A E L A D V I M A I G C N P Y E T Q T N Y F L A H W L P N  
UniRef90\_UPI0003C7E263 G I G K G T V S L D D I H E A D L V L V A G Q N P G T N H P R M L S  
UniRef90\_A0A023V2Q6 G L G K G T V E L D D F D H C D L V I C I G H N P G T N H P R M L T  
UniRef90\_X2NFQ8  
UniRef90\_J8W1X3 G S P V G T C V L D D F D V C D A I F F F G Q N T G S N S P R L  
UniRef90\_Q1QFI6 G V G E L N N C Y E D A E L A D T I V A V G T N A L E T Q T N Y F L N H W V P N  
UniRef90\_UPI0003B668ED G L G K G S V T L N D I H E A E V I L I M G Q N P G T N H P R M L T A  
UniRef90\_M3E3X0 G T G K G T V S L E D M H A D L I F V V G Q N P G S N H P R  
UniRef90\_D6KALO G V G K G S V L L D D L H Q A D L I V A G Q N P G T N H P R M L S A L E K A K

UniRef90\_R7XV69 R L R E L K R R G G H M V V F D P R R T E T A K V A T E H H F I R P G T D  
UniRef90\_B5IF98 G L D T W N V D V V K T K T A K M S N K F F M I K P E T D  
UniRef90\_U2M8B0 P E A G L M R A Q E Q G A R I V V I D P R F N E T A A K A D E W L Q I V P G T D  
UniRef90\_F0M2V7 T L H E L A R R G V P L I V F N P L K E R A L E R F A D P Q N V I R E M A T Y  
UniRef90\_G8WDL8 Q A D V W L R L R P G T W S N A P A L V R R D D N G Q F L R A G D V G L Q P A D A  
UniRef90\_W0HXP8 D H L E K A K G N G A K I I T E N T P L R E R G L E R F A D P Q K P L E V I T P  
UniRef90\_W0HXS2 R L R A L R R R G G K L V V I D P R R T R T A K L A D R H V A L R P G T D  
UniRef90\_D9WEZ7 L H S L R H A A N N G A K I I T E N T P L R E R G L E R F A D P Q N V I R E M A T Y  
UniRef90\_U3U9N9 L E K A K G N G A K I I A V N P L P E A G L M R F A D P Q N V I R E M A T Y  
UniRef90\_W9BH80 A G E V G R S R N R G A K I I V I D P N Y E H P L A S R A D H F L P V R P G S D  
UniRef90\_I4A7L9 P Y Y L K L A R E K G L P L I C I D P R Y T L S A E V L A D Q Y I P I R P G T D  
UniRef90\_Q24N20 L G K D P S R S M I V I D P V R T Q T A E L A D F H L Q L R P G T D  
UniRef90\_F5YSK5 D Y L Q C K N A N T K F I V I D I F R H A T A Q A L S A E Y V G I R P G T D  
UniRef90\_D0WIN8 N N L K E V A L E R F A S P Q S P T E L L T P A A T T L S H Q Y L T P L L G G D  
UniRef90\_A0KWD4 E T L R E V V Q R G G Q L L S F N T L R E R G L E R F A D P Q N V I R E M A T Y  
UniRef90\_X7E7C5 E T L K E V V Q R G A Q L L T F N T L K E R G L E R F A D P Q N V I R E M A T Y  
UniRef90\_F6CU45 E T L R E A S R R G A T I L A F N P L K E R G L E R F A S P Q N D A V E M A T Y  
UniRef90\_B8H4C9 L E T L A S A Y K R G A R V V A F N N L K E R G L E R F T N P Q N P F T T S  
UniRef90\_F0LX46 K R N V P R A L I R F T E P Q D M V E M A T F Q S T P I S S E F V H I K I G G D  
UniRef90\_K5YPY8 V A A D P A R S M V V I D P R V S E T A A M A D F H L Q V A P G R D  
UniRef90\_U5E3G6 T L H E A S R R G V P I V L N P M R E R A L E R F A D P Q N V I R E M A T Y  
UniRef90\_W0PIX0 M K L L Q Q A R Q R G A K V I L I D V F P S A T A G R V D E T I V V K P G G D  
UniRef90\_A4WBD6 K I K K E L K R G L K L V V I D P R V T P T T K A A H L H L Q I N V G S D  
UniRef90\_B8FTZ6 E L R E C A K R G A T I V A V N P L R E R G L E R F A S P Q H M L D M L S P  
UniRef90\_D5V5N2 A A Q V N R A R S R G V P V I A V T P D P S P V Q G L A D R V V R V R P G T D  
UniRef90\_UPI00037A5144 K A I R M N N A S L V I A N I D R N I S F S G T A K N D I R L T Y S F G S  
UniRef90\_UPI00046D6367 E L R E C A K R G A T I V S I N P L K E R G L E R F A D P Q S P L E M L T M  
UniRef90\_I3IP17 T L R E V V I R G A Q V L T F N T L R E R G L E R F Q H P Q N P V E M L T N  
UniRef90\_A0A023D2N5 N P M E R A L I R F A E P Q D P V I Q M A T F G S T A I A S E F V H V R I G G D  
UniRef90\_M2W833 R L R A L R E R G G T L V V V D P V R T R T A E V A D L H V P I R P G T D  
UniRef90\_W9BRN4 S R R L R D A I A G G L K L I V A D P R E S D Q T A A L A H I H L P V K P G E D  
UniRef90\_G8RS35 A Q S L K N A I D R G M K L I V I D P R R S Q T A A R A A V H I Q P R P G E D  
UniRef90\_N0CKL4 R L K A L R R R G S T L T V I D P R R T R T A R L A D R H V A I R P G A D  
UniRef90\_D4GEI4 T L Q E V S K R G A K I V A I N P L R E R G L E R F A S T Y Y K I R V G G D  
UniRef90\_E4P6U4  
UniRef90\_UPI0003F4ACF5 R R H I N P Q V E A G A T R T I I P H D I L A M A T F H A T P T S N L N I Q P R  
UniRef90\_UPI0004782867 L H Q L Q D A R K R G V P I I T F N P L R E P G L V S F A N P Q S P V Q M L T P  
UniRef90\_B2JRW4  
UniRef90\_UPI00046E829A F S K N P E K C L V V I D P R K S K T A R I A A D I H V P V R P G S D  
UniRef90\_A8ZX26 K i n v P R A L I R F T E P Q D P V K M A T F G S T A I A S E F V H I R I G G D  
UniRef90\_UPI000429C03A T K Y L Y E A K K A G T R V A V V N P Y K E E G L E R Y W V P F F Q I N Q G G D  
UniRef90\_E6SGB9 K R G A K M I A I N P L Q P Q N P F E M L T S N S E T Q L S A Y I N V R I G G D  
UniRef90\_Q83RF3 Q R I A E G R V D N H M K I V T F D R L S N T A G Q L S D E W I P V F P A T D  
UniRef90\_C4ZIN2 I R F A A R A K E A G A K F I V V D P R V S S T A S I A D E W I P I N P G T D  
UniRef90\_C7N5H8 A P L K Q A R K A D A K L V V I D P K R T K I A E Q C D L H L Q L V P G T D  
UniRef90\_B7QY50 N P M P E R G L E R F T S P Q D P A E M L T G R S V P I A T T Y F K P K I G G D  
UniRef90\_UPI00047E7E95 M R G A R V A V F N P V R E K G L E R M L T G S K P I A N E Y Y Q V R V G G D  
UniRef90\_V5SAT8 A G P N P S V L C V D P R D T P V A R A A T Q H L A P L P G T N  
UniRef90\_R1GFA5 L E I A K K N G A D I V S V N P L P E P G M M N F A D Q H L Q I R I G G D  
UniRef90\_UPI000376FCB0 V L E A A K G K G A E I I A I N P L P E A G L I R F S D Q H L Q V R L I G G D  
UniRef90\_UPI000464886C E L R E C A K R G A K I V S I N P L R E R A M Q G F V H P Q H Q P V I G G D  
UniRef90\_C5AIL8 E L E K A S R R G C S I V S I N P M R E R A M Q G F V H P Q H Q P V I G G D  
UniRef90\_I0IEY1 T L R D V S R R G A R I A F N P L K E R S L E R F A S P Q S I V E M A T F  
UniRef90\_UPI00036FC64C A L A K A H R R G A A I V H V N P L V E G A A R R T I D E V F H E F V S M G L N  
UniRef90\_UPI00047CBF00 L D L F R R G H K R G A K I V V V D V R Y T N A A Q A D E F I P L K P G T D  
UniRef90\_B9L6C0 S L R E V V I R G A Q V C V L N T L K E K G L T R F A D H Y Y R P R L G G D  
UniRef90\_UPI0002557DBC R P F I Q K A R K A G A Q V V V I D P L K E R T A A V A D W H I R P L P G T D  
UniRef90\_W4MC12 T L H E A A R R G V P I V F N P L K E R A L E R F A A P Q D P V E M V T M  
UniRef90\_C6B711 L T A C R K N G G K V V A V N P L P E A G L L R F K D P Q T Q I K I G G D  
UniRef90\_UPI0003B416BC H R L R A I A E R N V R L V T F D V R L S N T A A K S S E W V P I K P G T D  
UniRef90\_UPI00036EE16A W A L A K R G R N A A V I D V V W T R T M K A V D L P V V L V R P G T D  
UniRef90\_A4WMJ9 P E A G L L R F K N P Q N A S G L V G R G T P L A D R F L Q I K V G G D  
UniRef90\_C7QAY3 S L R E V S K R G A K I I A I N P L R E R G L E R F A G H Y Y K V R V G G D  
UniRef90\_D4BTF3 L R Q L P D E A H A S G R I I F V D P R R T V S A G K D N V M H L A I N S G T D  
UniRef90\_M5EIS8 A N K L L K A K Q E G K L E I G I V D I R E T Q I F K N S K Y K I V L P Y E S  
UniRef90\_J0L3Z3 L E E A K G N G A T I V A V N P L P E A G L M R F A D E F C Q L R L G G D  
UniRef90\_W7SFH7 L R S A A K R G A I V S F N P L R E R G L E K F Q N P Y F Q P K I G G D  
UniRef90\_UPI00034891BE K K W L D T L A G G C K L I V V D P R R T D V A L H A D W Y L Q A A P G H D  
UniRef90\_W8HGG9 L E A K V K N G A K L I V V D P R F N R S A A V A D L Y S P I R V G S D  
UniRef90\_V3TSE0 L Q I A K K G A K I I A L N P L H H T G L S H V F K N P Q D F M N P N G D  
UniRef90\_U10KBW3 N P M P E R A L I R F A E P Q D M V I Q M A T F G S T E I T S E F V H I R I G G D  
UniRef90\_B4SKD4 L H P L Q A A V K R G V P I L T E N P L R E R G L E R F T D H Y F Q L R V T G D  
UniRef90\_W3RSJ6 E L R E A A R R G A T I V S V N P L R E R G L E R F A S P Q H P V E M L T M  
UniRef90\_U6X065  
UniRef90\_W6X065  
UniRef90\_Q3AAD3 K R G A A I A A F N P A D P Q D K L E M L H N G S T R I A S D Y F Q L K I G G D  
UniRef90\_Q5GZ28 A I F T G S D I I A N P R K V I L K N E A N I D R N F T L G S D  
UniRef90\_UPI00036D0224 S L T E A F D R G A Q V V H I N P F I E A G A T K A I I P H D F L D M A T F  
UniRef90\_UPI000371817E K R Q G V A L R L L S D K K G K L S R L P G A Q T Y H V T P G A E  
UniRef90\_D7AE91 H Q L Q E A R Q R D A P I I T F N P L R E R G L E R F S T Q Y H Q V A T G G D  
UniRef90\_UPI000423D59D K L K D Q A K I A V V D P R L S T T A A K A D E W L P V I P G E D  
UniRef90\_Q5Y816 K R S F S D E S L Q P A K T I F V D P R R T A T A G K E N D Q L H L D I E P G T D  
UniRef90\_UPI0004742D98 A L E E T K R N G G Q V I A I N P L P E A G L I R F A D Q Y L Q I R P G G D  
UniRef90\_UPI0003C7E263 T L R E V A K R G A K I S I N P L N E R G L E R F S F Y Y Q V K I G G D  
UniRef90\_UPI0003V2Q6  
UniRef90\_X2NFQ8 L H P L Q K A V E R G A K I V T F N P I R E K G L E E F K N P Q S P L E M L T T  
UniRef90\_J8W1X3 L R E F G A E P V D R G R I I V V D P R R T V T A G K D G V M H L A V N S G T D  
UniRef90\_Q1QFI6 L Q K A K R N G A K I S I N P L I E A G L N H F K N P Q D F M N P N G D  
UniRef90\_UPI0003B668ED L S A L E E A K R N G A R I V A V N P L P E A G L R F A D R F L H I R V G G D  
UniRef90\_M3E3X0 A N G A R I S V N P L P E A G L E R F K N P G A A L T D L F L Q I R I G G D Q  
UniRef90\_D6KALO

UniRef90\_R7XV69 A W V L L A M L N V L F A D G L 250 A L A P A Y A D G L A E V E S A V A H F T  
UniRef90\_B5IF98 V L F A L G I A K I I V D R N Q L Y D E K F V L E Y T Y T R T G F E D F K E Y L K S I D  
UniRef90\_U2M8B0 T A L A L G M M K L I I L D A E A L H I D D A D L V Y D H C D S Q N L V R A H L K A G I T  
UniRef90\_F0M2V7 M A L L Q A V S R R L V I D A E A L D D H Q F L E E L G L E E L R A H L A E L D  
UniRef90\_G8WDL8 G S T N I A S T Y F Q V K A G E G L D R E A F L D E H H T L G F T E F A Q D V  
UniRef90\_W0HXP8 L T Y W D R H A N A V A V E G E W D E T A A A L R H G R F H C R P A F A L Y A R A  
UniRef90\_W0HXS2 K A L L E T H R Q H L A E D G I F W D D A F I N A H A H T G V E D Y L A A V D A T S  
UniRef90\_D9WEZ7 A L L L F A M V S V L F D E G L V A P G A L G A H L S G I D E I K G L A A G F T S  
UniRef90\_U3U9N9 M A A I R G I V K V L L E A E M H E R I D Q Y F V D D A N T K G I H A Y I E A V I R A D N T S  
UniRef90\_W9BH80 M A L F A G L G R V L L E A E R I D D R A F V D Q A H C A G F D A Y E R Q T R A V D  
UniRef90\_I4A7L9 S A L A M A W I N V I J E E D L Y D H D F V K K W T N A P M L I D A E T L D P I  
UniRef90\_Q24N20 L A M M L A V A Q V L Y E E E L W N K E Y V A E H N T D G F N K F R N Y V M G G E  
UniRef90\_F5YSK5 L H L L T A M V A V L V Q E E D L I D H A W L A E H H T D G L A E V A A V M R E V S  
UniRef90\_D0WIN8 T A L A L G M A Y V L L T E D L I D W D F L N R C H T V G F D A D H M Y V L G A Y  
UniRef90\_A0KWD4 M A A I R G M A K H I L E S N E C I D R E F I A A Q H T A F F A D Y E Q S V R H T D  
UniRef90\_X7E7C5 M A V V R G V V K V L I E M E E F D H E F I A A H T Q G L D A Y L E R V K Q T S  
UniRef90\_F6CU45 M A V V R G M V K V L I E M E E F D H D F I T Q H T Q G M G P Y L E R V K Q T S  
UniRef90\_B8H4C9 A M L V Q G M M K A L L A M S V L D H A F I A E H T E G F E A L M A Q L A L D  
UniRef90\_F0LX46 D Y F M P K L G G D M A A E S V F D L A F I A E H T E G M E A Y L D V V R T P  
UniRef90\_K5YPY8 V A L L K G I M K V L F E R D A A G E K V L D E E F I R D H T H G F A A L K A D  
UniRef90\_U5E3G6 A W L M A L V A V I T Q R E D L V D A E F L T A H T A G Y D E V R T A F R D I D  
UniRef90\_W0PIX0 G S T R I A S S Y Q V Q R G A L I D H D F I A E H T Q G F A Q F S D D L R N T S  
UniRef90\_A4WBD6 G S T D I G V A K H L L A L J E A Q Q G E V L D S D F I A Q H T Q G F D A F S A D  
UniRef90\_B8FTZ6 G A L A L A V L R E L M I T K T S I N S R F L V H E A E G W E N L K N D W L S E A D  
UniRef90\_D5V5N2 I D F F N L V C Q R L M I T D E K I D S N Y I D E K Y T N N F E T Y K N D L S R E A D  
UniRef90\_UPI00037A5144 K G L I K G V A K R V L E M D D I D V E F L A E H C A H F D D F A A D L R A S D  
UniRef90\_UPI00046D6367 R F L A L G C C R L L D S E G A R L R P A D R E A S N P E A F E A L V R S R T A E S  
UniRef90\_I3IP17 Q I L F H A L I K I I D E K L I D L K K I R A S S I N F H E L H L A F N T F A S  
UniRef90\_A0B0Y7 F A L I K G M A K R V L E L D D I D T A F I D A H T A G F D A F A D D L R A E S  
UniRef90\_F2JWR7 M A A V R G I V K L L E K E D L D W A F I N E H T S G I K E Y L C Q V R S T S  
UniRef90\_A0A023D2N5 L A F V K G M V K A I L F E E D V L D R A F L A E H T H G M E A W R D E L L A L D  
UniRef90\_M2W833 A L F L L G V L A V I A E E G L A R P G R V P D V V D G L D E A L A  
UniRef90\_W9BRN4 P A I L A G M I H V I L E E R L Y D E A F V Q E E N V D G F D E L A K A V S G F T  
UniRef90\_G8RS35 A A I L A G I N I I T E K L C D W R F L A E H L E G A D E L A A A L A D F T D  
UniRef90\_NOCKL4 A L L L A A M A H V L L Q E K L A D P G P L A E H L E G A D E L A A A L A D T T D  
UniRef90\_D4GEI4 A A M L K G V M K C L L A M D D E D E T F I E Q H T Q G I D A L K A D L A T T D  
UniRef90\_E4P6U4 A A M L K G V M K C L L A M D D E D E T F I E Q H T Q G I D A L K A D L A T T D  
UniRef90\_UPI0003F4ACF5 L A L F Q A L N R L L L E S D A V D R A F I D A H T H G F E A F E K H V R D L D  
UniRef90\_UPI0004782867 S A G D M A L M R G I A D E H A I D R L F L E R H T E G F E A Y R A R V V E A T S  
UniRef90\_B2JRW4 A E T Q I G M C K A V I E A D D I D V A F V D E H H T T G F D E F A A C A R A T D  
UniRef90\_UPI00046E829A A L L I R A L I A M L V D R K D L L N H Q Y M K K H H V S G W E R L K P W F E N F D  
UniRef90\_A8ZX26 L A L V K G M I K A L L V E R D A L D D Q E F F I A E H H T H G F E A W R D E V L S C S  
UniRef90\_UPI000429C03A V A F F N G V L K H L V E T R G R L D H H F I R H H T A G F D E L A A F L R  
UniRef90\_E6SGB9 M A L L K G M M R L L I E R D L D D S E F I Q T H T V G F D E L R R D V L N S E  
UniRef90\_Q83RF3 G A V A L A I G H V I L E R D L Q D S A F I D T W T N V T V D E L K A  
UniRef90\_C4ZIN2 T A M I L A M M N V I J A N D L H D G A Y L A W D T D G V A C H P T M D D L V A  
UniRef90\_C7N5H8 V V L A M A L A A E I L D R R G A L D Q D F I A R W T T G A D P Y M A A A H G Y T  
UniRef90\_B7QY50 I A T M K G M M K W L F E A D A D R A F I A E H T T G L E A L R D D V Q A T S  
UniRef90\_UPI00047E7E95 M A A V R G I A K A V F A A D D L D H G F L R Q H T S A F S A Y R A T V D A T S  
UniRef90\_V5SAT8 V A L M N G I L H E I T E H G R V D R A Y V E R Q H T V G Y D D L A A T V A D Y P  
UniRef90\_UPI00037FCB0 Q A L F L A V G H L L L E A E A L D K S F I E S H C A G Y E E Y A A H M R A E L D  
UniRef90\_UPI000464886C L A L F Q G V G R L L I E A E D L D R D F I E S H C A G Y E E Y A A H M R A E L D  
UniRef90\_C5AIL8 F A L I K G I A K R V L E L D D L D V A F I D A H H G A G F D A F A A D L R A E S  
UniRef90\_I0IEY1 L A L F T G L C K A V L E E G T I D R G F I A A H T L G F D A F E A A V K A E P  
UniRef90\_UPI00036FC64C S S T P I A D S Y Q Q L K V G G L D H A F I A E H T N G F D A F V A D L D A T E  
UniRef90\_UPI00047CBF00 K S T P T G T M D V Q V R I N K G A V D R D F L D R H T T G F E V Y A K I V R E S A  
UniRef90\_B9L6C0 L A L M L A M I H E T I N K G Y K P Y K A A D Y N A D G L D E L V E Y F T N G  
UniRef90\_UPI0002557DBC M A V F R G M S K V V L E A E D L D H A F I R Q H T T G F D A W C A M V R A T D  
UniRef90\_W4MC12 A S L A L G M M H V M V E E G L Y D A D Y V A E H T H G F E P L C A R L A E Y P  
UniRef90\_C6B711 S S T P I A S A Y H Q V R V I G G L D R P F I E E H T S G F D I L R A D  
UniRef90\_UPI0003B416BC Q A L F Q A L G H I L L R K E A V D R E F I D S V T E G F D D Y A A A R A D L D  
UniRef90\_UPI00036EE16A L A V V L A M C H V V M G E R D L H K E A F L E Y C K V T D K R E A K V A A L K A  
UniRef90\_A4WMJ9 V V L A L G V A R E I L E R G A Y D R E F V E K Y T Y G F H L F R E Y V Q K F T  
UniRef90\_C7QAY3 L A L F R A F G K L L L E A E D L D Q G F I A E Y T H G F E D Y A K A R S T D  
UniRef90\_D4BTF3 T A L L K G V M K L L E A E K Q L D T E F I S T H T Q G Y E A L K N D L L T T S  
UniRef90\_M5EIS8 M V L F N A W L T E I A D E G W V D K A F I D A S T K D F D K A L A N K T T  
UniRef90\_J0L3Z3 N L L F N M M A R V I L E E N L V N E K F I D T R T K Y F A E Y R E S I L A D E  
UniRef90\_W7SFH7 L A F F R A L G H L V L E A E D L D R E F I D S C H T H G F E E W A A D I R Q L D  
UniRef90\_UPI00034891BE L A A V K G M I K C V L E A D A V D V A F I A A H T A N V D A F T A D V L A E P  
UniRef90\_W8HGG9 I A I L A A M L R I V I D E G L F D Q D F V A R H V R G L P E L T A A V H R F D  
UniRef90\_V3TSE0 T T F L L G V V N Y L L S H D K V Q M A Y V K A Y T N A N L L V D A D Y R F D E  
UniRef90\_I0KBW3 L A A L R G I M K H L L E A E A L D H A F I E E Y T D H Y D D F V T T I R Q T S  
UniRef90\_B4SKD4 L A L I K G M M K V M F E R E A Q G E R V L D H D F L A E H T V G L D A L R A D  
UniRef90\_W3RSJ6 T A A I V G L C K A V I E A D R I D V A F I E Q H T H G F D A F A E F C R N Q R  
UniRef90\_W6X065 F A L I K G V A K H I L L E L D D I D L D F I A R H T L G F E A F A E D L R N E D  
UniRef90\_Q3AAD3 L A A V K G I L K H V L E R D L D L E F I A A H T A N F E A F A A D V  
UniRef90\_Q5GZ28 A V V V N R M S R L I I D Q G L V N T K K I A S A V P N Y D E L V Q S L A S Y T  
UniRef90\_UPI00036D0224 H A I L L R G M A K A V L E Q A K T D P K A I D K Q F I E R H T S G F E E Y R A L  
UniRef90\_D7AE91 L V L V N A L A K T I V D E G L H D A S S V G A L K G F D A W L K  
UniRef90\_UPI000423D59D T A A I T G I A K A L L A E L D L D H A F I A S H T Q G F Q A F T D Y V R R S T  
UniRef90\_Q5Y816 G A L A I A I A H V L L T E E L W Y K P F V E D D F E E I Q T Y G L V K W N I  
UniRef90\_UPI0004742D98 I A L F N G L F T Y V V D Q G W H D Q E F I R S H T N G F E Q V R S E N R L S M  
UniRef90\_UPI0003C7E263 L A L F Q M L N R L L L E A E A L D H D Y I G A H T L G F D E F A K H S V A I S  
UniRef90\_A0A023V2Q6 A S L L K G I M K A L I E M D E L D H A F I H Q H T E G Y S A L Y D D L R Q C S  
UniRef90\_X2NFQ8 K K T D I A A I T G L I K H H V L D V D F I A Q H T D G F A E M K A H A E A T S  
UniRef90\_J8W1X3 L I L F N A W L T Y I A S K G W I D K A F I D A S T K N F D K A R T A N N V I S L  
UniRef90\_Q1QFI6 M A L L R G I M K H L F E A E D V D R P F I D K Y T T G F E E F E Q N I R A T S  
UniRef90\_UPI0003B668ED L A L F Q G L N R L L E A E D L D H D F I R E N T D G F E A F A R H I R S V D  
UniRef90\_M3E3X0 A L F R L L N K L L L D T E G A V D E L F V R E H T H G F E E F A A A R A A D  
UniRef90\_D6KALO A L F R L L N K L L L D T E G A V D E L F V R E H T H G F E E F A A A R A A D

UniRef90\_R7XV69 P A L A E Q M S G V P A A D L E R V A L 300 E L A T A E G G V A Y G R V G 320  
UniRef90\_B5IF98 L N F V A E E S G T D I E K I E D F A I N Y A R E R G I V H I G Y G  
UniRef90\_U2M8B0 P A L F Q H Q L P A D S G Y R T F E E T V Y Q Q A A P W T L D R V A I P A H T I  
UniRef90\_F0M2V7 E D A V L E A T G L R T V E E I D E L A D R Y M A A D K V I T W A M G  
UniRef90\_G8WDL8 D A T P W P D I E R E S G L T R G D L E R V A A A Y A K S N A T I I T Y G M G  
UniRef90\_W0HXP8 C A A Y T P A R T A A L E T W V S T H D L R R A A D L L A A A H R V A Y H A W S G  
UniRef90\_W0HXS2 W Q Q I T Q S G L S E T Q D L R E V A E I Y R G A K R V I C T A W A M G  
UniRef90\_D9WEZ7 P E A V A D A C D V P A E E I R T L A R E F A A A P R A V A Y G R V G  
UniRef90\_U3U9N9 W H D I S Q S G L K E L Q I R E A A Q I Y Q K S N R V I T W A M G  
UniRef90\_W9BH80 L D V V A E A T G V D D T Q L R R V A A M F A Q S Q R T V I C W A M G  
UniRef90\_I4A7L9 T E A A F K K E G N K G Q L M I W D E M T H S P Q P I G S T T A S P A L N I T Q  
UniRef90\_Q24N20 D G V P K T P E W A A P I C T V P A E T I R A F A R L Y G T T K V H L Q C H Y S  
UniRef90\_F5YSK5 V T D H C A V A D V P E D L V R A A A R R I A E A G S V A M L E D L G  
UniRef90\_D0WIN8 D G T P K T P E W A A E I C G V N P A I E E L A L E I A K T E K V S I I M S P A  
UniRef90\_A0KWD4 W Q Q I E A Q S G L A K D D I I H A A A T V F S Q S K T V I S C W A M G  
UniRef90\_X7E7C5 W S H I I E Q S G L T K E D I I H T A N V Y A K A E S V I I T W A M G  
UniRef90\_F6CU45 W N D I L N Q A G L T R E E I Q Q A A E V Y A H A N S V I I T W A M G  
UniRef90\_B8H4C9 W S V I E A G S G L S R A R I E E A A V V Y A K S K A A I L C Y G M G  
UniRef90\_F0LX46 W E Q I E Q S G L S Q A E L T P A A D I Y Q N A Q R V I V T W A M G  
UniRef90\_K5YPY8 I E A T N W A D I V A V S G I E E A Q I R R C A D V Y I A S N A T I I C F G M G  
UniRef90\_U5E3G6 I P A F A T I S G V D V D R I R A A A R R I A A A S V C V Y E D L G  
UniRef90\_W0PIX0 I T A T P W E A I E R E S G L T R A D L E T V A V A Y A K S N A T I I S Y G M G  
UniRef90\_A4WBD6 P E E M R T I A G V T P Q M V A D L L A N E L R H S S N P A F W L G K G  
UniRef90\_B8FTZ6 K T K M L K R T G L S K E Q F E E F I T M F Y E N E N I I S A W T M G  
UniRef90\_D5V5N2 W S E I V E E S G V P Y E E I D R L A G I Y A R G K A V I A T W G M G  
UniRef90\_UPI00037A5144 E W L G A C D V A R A D A E A L A A L Y A R T R T A T I V G W G  
UniRef90\_UPI00046D6367 V K E A S Q V T G I S E E M M R T A R L L T K S G N C C I I C G R D V E E D P  
UniRef90\_I3IP17 W S A L T A E S G V P Y E Q I D A L J A Q L Y A R S E R V I A T W G M G  
UniRef90\_A0B0Y7 W D V I L T Q S G L S M D E L R H A A N V Y C Q S D K V I C T W A M G  
UniRef90\_F2JWR7 W E D I T R V S G L G E E Q I R R A A D I Y V R S N A T V L C F G M G  
UniRef90\_A0A023D2N5 L A R E Y T P E S V A E A C G V D V A S I R T V A R G F A G A P A A V H S R I G  
UniRef90\_M2W833 P A V A A A R A G V S E A D L I A A A R M F A G G T R G S A S T G T G  
UniRef90\_W9BRN4 P T Y V A A R A D I P A D Q L I D A A R L F A S Y G T R G M V N A G T G  
UniRef90\_G8RS35 P D A V A A A C D V D A A T I T A L J A R E L A A A P T A A V Y A R I G  
UniRef90\_NOCKL4 W D H I L K V S G M T R E Q I Q H I A H L Y A N A E R T I C Y G M G  
UniRef90\_D4GEI4 D G I A K T P E W A A K I T S I P A E K I I Q L A R E I G S K P A Y I C Q G W G  
UniRef90\_UPI0003F4ACF5 W G D V L E A T G L T R G E I A A T L G D V L S A E R I V V C W A M G  
UniRef90\_UPI0004782867 W D E I V H Q S G V A K Q D I L K A A A I Y R D A D R S I T W G L G  
UniRef90\_B2JRW4 W S E I E R V S G L T R A A L L D A A G E Y M R A N A V M A H Y G M G  
UniRef90\_UPI00046E829A Y R T A I S V C E I V D Y D Q A E N L C H L L A T R K W C M H A E M G V L M N R H  
UniRef90\_A8ZX26 W Q D I T R V S G I S E E Q I R R V A E I L Y A R S K A T V L C F G M G  
UniRef90\_UPI000429C03A E L S W E D L E R S A G V P A A E M R R F A E L Y A S A R T S I T W S M G  
UniRef90\_E6SGB9 W K D I E R I S G L S Q T Q I A E L A D A Y A A E R T I C Y G M G  
UniRef90\_Q83RF3 H Y A Q Y T P E W A S K I S G V P V Q T I E R I A R E F A T K P A T I C Y G M G  
UniRef90\_C4ZIN2 E V Q N W T P E R A S E I T G V P A E R I E S L A I E Y A N K P A A I Q T C T G  
UniRef90\_C7N5H8 P D Q V R D I C G L P V E Q F N Q L A D W I C A A R T M S T S L G N G  
UniRef90\_B7QY50 W S I E R A S G L T R A E I E V A A G I Y A A E K V I F C Y G M G  
UniRef90\_UPI00047E7E95 W D E I E H Q S G L A R V A L E H L A Q I Y V I E S D R T I C T W A M G  
UniRef90\_V5SAT8 P E R A A E I C G L D P G E I R E A A R L L G S A D R L L C T V L Q G  
UniRef90\_R1GFA5 F D A V Q E G T G L T L P Q I R G L A D A L M R S K R T I F C W A M G  
UniRef90\_UPI000376FCB0 W A A L S A E S G V S Y Q Q I D S L A R L Y A S S E R V I A T W G M G  
UniRef90\_UPI000464886C W E A L A F R S G V G V E R M Q E L G R L Y A G R E V I A C W A M G  
UniRef90\_UPI00036FC64C W S S I E T G S G L T R Q A L E E V A L A Y A K A K S T I I C Y G M G  
UniRef90\_UPI00047CBF00 W A D L E R V S G V R E A R I R E L A A V Y L R S K R T L V A W C L G  
UniRef90\_B9L6C0 E G S K Y T P E W A S K I T E I P A D T I R R L T K E F S D G A N C Y R S R K  
UniRef90\_UPI0002557DBC W D H I E D Q S G L T R D E I T A A A Q L Y I D A E R V I T W A M G  
UniRef90\_W4MC12 P E R A A R L T G L E T E I V R L A R L Y A T T R P A V I R P L V G  
UniRef90\_C6B711 I D A T S W Q E I V A I S G L T R Q A I E S A A D V A N A R N V I C Y G M G  
UniRef90\_UPI0003B416BC W P T I E V A T G L T R D E I E H I G D L L A E S K A T I V C W A L G  
UniRef90\_UPI00036EE16A H F E P Y S P E W A E K L S G V P A Q T I R R L A R E F A T H P A C V I S Y R G  
UniRef90\_A4WMJ9 P Q Y V E D E A G V P R D I F Y K L V D I Y L R R P V T V I G F A  
UniRef90\_C7QAY3 W P E I L A A T G L S R E E I Q A A F E E V R A S Q R L I V C W A M G  
UniRef90\_D4BTF3 W K D L L R V S G L P R E S I E E I A D L Y I E A K S T I I C Y G M G  
UniRef90\_M5EIS8 L E D A A K I T G L S V D Q I R Q S A A W I A E P K E G K R R T M F A Y E K G  
UniRef90\_J0L3Z3 Y T N P D F F K K L S G Y E H L A D E V R H L A R N Y A S K K S M I L W G L G  
UniRef90\_W7SFH7 W D E V D A A T G L S R E Q I A H V A R L L V E S K R T I I C W A M G  
UniRef90\_UPI00034891BE W D V I V R E A G L T R A E I Q R A A D I Y M G A G K V I A C W M G  
UniRef90\_W8HGG9 P D D V A R R A G I A G A D L V S A A R C Y A G A K R G Y T M A G T G  
UniRef90\_V3TSE0 G I F S G I N E Q E H K Y D R T S W Q Y E R D E N G Y A K R D P T L S H P R C V  
UniRef90\_I0KBW3 W A D I E A I S G L T K A Q L K E A A D L I G P K K K Y V T C W A M G  
UniRef90\_B4SKD4 V M A Q D W N E I V Q V S G I T Q A Q I R R C A E I Y I R S K A T V I C Y G M G  
UniRef90\_W3RSJ6 W D E L E R I S G L T R D A L E A A A D I Y M K A N A V I A N Y G M G  
UniRef90\_W6X065 W S L L E R E S G V A R E D I E A L G R I Y A H G K R T I A T W G M G  
UniRef90\_Q3AAD3 Y T P E F V E R E T G V K A E D V V K I A R E M A T I K P L H I I Y G A  
UniRef90\_Q5GZ28 H A E R W D T I V E S G L E E A A L R K A G E I Y L N A G R V I A C W G M G  
UniRef90\_UPI00036D0224 A E A T Q K T T G I S D E V L T R A A N R F G R T A D R Y L L I G N D  
UniRef90\_UPI000371817E C E A T P W E E L E R Q S G L S R A D I L K T A R I Y T D A D R S I I S W C L G  
UniRef90\_D7AE91 S I E S C T P D Q A A G Q C G I A A D T I K A V A R E Y A A G K A L I M L P L G  
UniRef90\_UPI000423D59D W P E L E R Q S G L S R G A L E A A A I V Y A R S Q R V M F V Y G M G  
UniRef90\_Q5Y816 A L K D A T P E W A A E R S G I P A E Q I Y R V A R D F A A P K A I S F M S P G  
UniRef90\_UPI0004742D98 A E T S R I T G V P V E R L K L A A E W A Y R P R A S G A R P R T M H A Y E K G  
UniRef90\_UPI0003C7E263 W D E A L L A T G L T R E I E E T L R R V L A S K K V I V C W A M G  
UniRef90\_A0A023V2Q6 WA K L E Q D S G L T R S Q M E D L J A H S Y N K S R A T I I C Y G L G  
UniRef90\_X2NFQ8 M T R E L A A C A P H A L V S P G  
UniRef90\_J8W1X3 W D D I E R E S G L S R E D L G E A A Q I Y I E A P R A I A M F G M G  
UniRef90\_Q1QFI6 D E A A R V T G L T A D Q I R Q S A E W I A Q P K S G N A R R T M F A Y E K G  
UniRef90\_UPI0003B668ED W E D I E E L S G L S Q A Q L L E A A N M L A T K Q K I V I T C W A M G  
UniRef90\_M3E3X0 W D D I T A A T G L T R A E I E Q V R D E V L R S E R V I V C W A M G  
UniRef90\_D6KALO W D E T L R A T G L T R A E I D R A F E M V L A S R R T I V C W A M G



UniRef90\_R7XV69  
UniRef90\_B5IF98  
UniRef90\_U2M8B0  
UniRef90\_F0M2V7  
UniRef90\_G8WDL8  
UniRef90\_W0HXP8  
UniRef90\_W0HXS2  
UniRef90\_D9WEZ7  
UniRef90\_U3U9N9  
UniRef90\_W9BH80  
UniRef90\_I4A7L9  
UniRef90\_Q24N20  
UniRef90\_F5YSK5  
UniRef90\_D0WIN8  
UniRef90\_A0KWD4  
UniRef90\_X7E7C5  
UniRef90\_F6CU45  
UniRef90\_B8H4C9  
UniRef90\_F0LX46  
UniRef90\_K5YPY8  
UniRef90\_U5E3G6  
UniRef90\_W0PIX0  
UniRef90\_A4WBD6  
UniRef90\_B8FTZ6  
UniRef90\_D5V5N2  
UniRef90\_UPI00037A5144  
UniRef90\_UPI00046D6367  
UniRef90\_I3IP17  
UniRef90\_A0B0Y7  
UniRef90\_F2JWR7  
UniRef90\_A0A023D2N5  
UniRef90\_M2W833  
UniRef90\_W9BRN4  
UniRef90\_G8RS35  
UniRef90\_NOCKL4  
UniRef90\_D4GEI4  
UniRef90\_E4P6U4  
UniRef90\_UPI0003F4ACF5  
UniRef90\_UPI0004782867  
UniRef90\_B2JRW4  
UniRef90\_UPI00046E829A  
UniRef90\_A8ZX26  
UniRef90\_UPI000429C03A  
UniRef90\_E6SGB9  
UniRef90\_Q83RF3  
UniRef90\_C4ZIN2  
UniRef90\_C7N5H8  
UniRef90\_B7QY50  
UniRef90\_UPI00047E7E95  
UniRef90\_V5SAT8  
UniRef90\_R1GFA5  
UniRef90\_UPI000376FCB0  
UniRef90\_UPI000464886C  
UniRef90\_C5AIL8  
UniRef90\_I0IEY1  
UniRef90\_UPI00036FC64C  
UniRef90\_UPI00047CBF00  
UniRef90\_B9L6C0  
UniRef90\_UPI0002557DBC  
UniRef90\_W4MC12  
UniRef90\_C6B711  
UniRef90\_UPI0003B416BC  
UniRef90\_UPI00036EE16A  
UniRef90\_A4WJM9  
UniRef90\_C7QAY3  
UniRef90\_D4BTF3  
UniRef90\_M5EIS8  
UniRef90\_J0L3Z3  
UniRef90\_W7SFFH7  
UniRef90\_UPI00034891BE  
UniRef90\_W8HGG9  
UniRef90\_V3TSE0  
UniRef90\_I0KBW3  
UniRef90\_B4SKD4  
UniRef90\_W3RSJ6  
UniRef90\_W6X065  
UniRef90\_Q3AAD3  
UniRef90\_Q5GZ28  
UniRef90\_UPI00036D0224  
UniRef90\_UPI000371817E  
UniRef90\_D7AE91  
UniRef90\_UPI000423D59D  
UniRef90\_Q5Y816  
UniRef90\_UPI0004742D98  
UniRef90\_UPI0003C7E263  
UniRef90\_A0A023V2Q6  
UniRef90\_X2NFQ8  
UniRef90\_J8W1X3  
UniRef90\_Q1QFI6  
UniRef90\_UPI0003B668ED  
UniRef90\_M3E3X0  
UniRef90\_D6KAL0

V S T H E F G S V C Q W A V N L L N I V T G N L D S V G G A M F S S  
F Q R T I N G G E A V R A I S I L P A L I G K K  
L I R L A K K D Y A T T A P A M I V Q N M S G A Q R T E F G T Y V A A S Q R G F Y L A L  
I T Q H K N K G V A T I K E I V N L L L R G N I G K P G A G A S P L R G H S N V  
I T Q H N K G T S N V R L I A D L L L M R G N I G K P G A G A I C P L R G H S N V  
V A Q Q T N S N A T Q T D R A I A C L Y A L T G S F D A E G G A N R I F A K P P Y R P  
I T Q H K H S V A T I R E I V N L Q L L F G Q L G K P G A G A I C P V R G H S N V  
S S T V E F G T L T N W L V D V L G A L T G N L D R K P G G M M F P L S R A T G G W  
I T Q H K H S V A T I R E I V N L Q L L F G Q L G K P G A G A I C P V R G H S N V  
I T Q H R H A V A T I G E A T N L L L M R G M I G K P G A G A I C P V R G H S N V  
E I T L T D G R K I T V I T A W Q A A R M Y A T T K P G A I T V F Q G I E E H T  
V G K R H L G D Y A A A A S M I L Q A M V G S L T G R P G G C R I P V P F A D F K  
I Q M N R R N S T V V S Y V E K L V W L L T G N F A K R G T Q Y V F S G L A P I A  
P S R T T N G M T W C Q A T M T L G A M S G C I G K P G C C C G S D A G H A S W L  
I T Q H K H S V D T I R E I V N L H L L C G Q M G K A G A G A I C P V R G H S N V  
I T Q H H H S V P T I H E I V N L L A L R G N L G K P G A G A C C P V R G H S N V  
I T Q H R D S S G T I Q Q L V N L L L K G N I G R P G A G A I C P V R G H S N V  
L T Q H R H S V A T I Q E L V N L Q L L F G Q V I G K P G A G A I C P V R G H S N V  
V T Q H Q Q G A R V I Q Q I A N L L M L R G N F G K P G A G A I C P V R G H S N V  
I T Q A P N S T L V S Y L N K L L W I V T G N F G P P G T M F L H S  
I T Q H N K G T S N V R L I A D L L L M R G N I G K P G A G A I C P L R G H S N V  
I T Q H N K G T S N V R L I A D L L L M R G N I G K P G A G A I C P L R G H S N V  
L Q K Y S N S G V D K N L S I L N M H L I T G K I N K E G N G P F S L T G Q P N A  
L N Q S V Q D K N L S I L N M H L I T G K I N K E G N G P F S L T G Q P N A  
L T Q H K H A V A T L Q M L T N L M L M R G N I G R R G A G L C P L R G H S N V  
L V R R D T Y G A L N V R A I H A L A F V A G T L G V E I G G G V Y F N I P S S R H  
L S Q R H P K A L M N L C V L M N A S S P D K D H S K A S L F S N S H N S S  
I T Q H K H S V A T V Q M L T N L M L M R G N I G R T G S G A C P V R G H S N V  
I T Q H K H S V A T I H E I V N L S L R G N I G K P G S G A C P V R G H S N V  
L T Q H Q N G A R M I Q Q L I A A L L M L R G N F G K P G A G A I A P I R G H S N V  
T C M Q E F G T L S N W L V E V L T I V T G N L D R P G G A M F S L P P A  
P E M A G N G T L T Q Y L V S S L N I L C G R F C R E G E K S A I P R I L P V  
A N M A M H G N L V E I L C L T S I C G R W Q R A G E R V T R P N T L P A  
S C T V E H G T L A S W L V D V L N I L T G N L D R P G G A L F P L S A T A R A  
I T Q H Q Y G T Q N V Q Q I A N L L L L R G N M G K K G A G I C P L R G H S N V  
P Q R H S N G E Q N S R A I A M L S V L T G N V G I N G G S G V R E G S W D L  
L T Q H R N S V P T I R E V N F L L L R G N V I G R P G A G A I C P V R G H S N V  
V N Q H R H A V A T I R E I V N L L L R G N I G R E G A G A A P N R G H S N V  
L T Q H R L G V Q D N V R M L T N L L L R G N I G K P G A G A P S P V R G H S N V  
L N Q S T H G T W H T N A I C N L H L A A G A I C R P G S G P F S L S G Q P N A  
S T V T S Y L L V L L T A I C G R L L V P G G V V I P G A G M V P L G F H T D E R  
I T Q H Q Q G S R M I Q Q L I A A L L M L R G N F G K P G A G A I A P I R G H S N V  
V T Q H R H G T H N V L A I T N L A L A L G R I G K P H C G L M P I R G H S N V  
I T Q H E H G T Q N V Q Q L V N L L L M K G N I G K P G A G A I C P L R G H S N V  
P A K H L Y G S Y N E K A C M M L P I M T G N V E K R G G  
S S R Y Y Y G Y E I C R A A A T L A G L C G Y T G R A G G G A S R N N G G N P I  
I E R G R S G G S G L R A A M A L Q A L T G Q H G R I G A G A V M A K P G F A A P  
I T Q H R H G V E N V Q Q L V N L L L R G N I G K P G A G A I C P L R G H S N V  
V T Q H R H S V A T I R E I S N L M F L R G N V I G R P G T G L C P L R G H S N V  
F Y Q S H Q A S A A A V I Q V N L V L L R G N I G K P G A G A V L Q M N G Q P T A  
L T Q H R E A V A T I T E L V N V L L L Q G N I G K P G A G A P C P V R G H S N V  
L T Q H A D A V N T I N E A V N L L L L R G M I G K P G A G A I C P V R G H S N V  
I T Q H K H S V Q T I H M L S N L M L M R G N I G R R P G A G A I C P V R G H S N V  
L T Q Q R D A V A T I Q M L S N L L L V R G N L G R P G A G A C C P V R G H S N V  
V T Q H R T G T H N V Q L L A N L L L M K G N I G R P G A G A I C P L R G H S N V  
I T Q H D H A V D T I R E I V N L M L R G N I G T E G A G V C P V R G H S N V  
S T W Y Y Q V D F R R A Q A I F N V L H G C V N R P G G V L Y E Y E D F P I Y  
I T Q H L H S V P T I R E T A S F M F L R G N L G R E G A G L C P V R G H S N V  
M E H H A Q G A M M F R T V A C L P A L R S G A W R D R G G  
I T Q H A K G T Y N V Q H I A N L L M L R G N I G R E G A G I A P I R G H S N V  
I T Q Q P H S V D T I K E I V N M L L V Q G N F G K P G A G A C P V R G H S N V  
A I G T E N G E T E R A I Q T L A A I T G N I D N P G G R K A L I E P K W Q F  
I G R T E N G E D A R A I S L I H A L L G D P A W G F Y Y S N S G A W G I  
L T Q H K H A V P T I R E V V N V L L L G G H V G R P G A G A I C P V R G H S N V  
I T Q H E H G T Q N V Q Q L V N L L L K G N I G R E G A G A I C P V R G H S N V  
L I W G N D N Y R T N A A L V N V A L A T G N I G R E G G C V R M G H Q E G  
I T E N F D G S K A V M A M T N L A L L T G N I G G S G V G L M P L R G Q N N V  
L T Q H K H S V P T I R E L V N V L L M R G M I G K P G A G A I C P V R G H S N V  
I T Q H R H S V A T I R M I V N L L L R G N I G R P G A G A P C P V R G H S N V  
P N M A G E G T L V E Y L V L V L E T L C G R W L R A G E T V S A S P T L L P S  
W N  
I T Q H K N G V M C I Q E I V N L H L M K G A I G I P G A G T C P V R G H S N V  
L T Q H Q Y G S T L L Q Q V A N L L L L R G N F G K P G A G A I G P I R G H S N V  
I T Q H V H G V E T V K M I V N L L L L R G N I G K P G A G A I C P V R G H S N V  
L T Q H K H S V Q T V H I L S N L M M M K G N I G R L G A G L C P V R G H S N V  
S N Y Q W H G D L K G R A L A L I V V L T G N L G K P G A G A I S T Y A G Q Y R I  
I T Q H K H S V A T I H M I T N L L L L R G H L G R P G A G A I C P V R G H S N V  
I F D T G K G E D A L N A L N L S I L A H H G A E G S V S I F P P R E H C N  
V T Q H E H G V D T V R E I V N L L L L R G N I G R E G A G A P S P V R G H S N V  
M G Y P G H G K A L A Q A L I N L A L L T G R V I G K P G A G A I C P V R G H S N V  
I T Q H R H G V T N V Q M L V N L M L M R G N I G K P G A G A I C P V R G H S N V  
S N M V V R G Y T A Q A M A A L N G L V G S A D I C G G E S A P V N S W P S I  
L I W G N N Y L T Q S A L V D V V L A T H N V I G R R G T G V V R M G H Q E G  
L T Q H K H S V P T I R E I V S F L L L R G N L G R P G A G A I C P V R G H S N V  
I T Q H K N G T G N V Q Q L V N L L L L K G N M G K L G A G I C P L R G H S N V  
H T F S Q E E Q D M R M I F T L N V L L G N T E R E G T G L Y Q K N A S V I Y N  
L T Q H V H G S Q N I A A L N L W L L K G N V R E G T G I S P V R G H S N V  
L I W G N D N Y R T N A A L V N L A L A T G N V G R P G G G C V R M G H Q E G  
V T Q Q K N G V Q T I Q E L V N L Q L M K G A I G K P G A G A C P V R G H S N V  
I T Q H K H A V P T I R E F V N F L L M L R G N I G R A G A G A C P V R G H S N V  
L T Q H K H S V P T I R E V I N F L L L R G N I G R T G A G A I C P V R G H S N V

UniRef90\_R7XV69 UniRef90\_B5IF98 UniRef90\_U2M8B0 UniRef90\_F0M2V7 UniRef90\_G8WDL8 UniRef90\_W0HXP8 UniRef90\_W0HXS2 UniRef90\_D9WEZ7 UniRef90\_U3U9N9 UniRef90\_W9BH80 UniRef90\_I4A7L9 UniRef90\_Q24N20 UniRef90\_F5YSK5 UniRef90\_D0WIN8 UniRef90\_A0KWD4 UniRef90\_X7E7C5 UniRef90\_F6CU45 UniRef90\_B8H4C9 UniRef90\_F0LX46 UniRef90\_K5YYP8 UniRef90\_U5E3G6 UniRef90\_W0PIX0 UniRef90\_A4WBD6 UniRef90\_B8FTZ6 UniRef90\_D5V5N2 UniRef90\_UPI00037A5144 UniRef90\_UPI00046D6367 UniRef90\_I3IP17 UniRef90\_A0B0Y7 UniRef90\_F2JWR7 UniRef90\_A0A023D2N5 UniRef90\_M2W833 UniRef90\_W9BRN4 UniRef90\_G8RS35 UniRef90\_NOCKL4 UniRef90\_D4GEI4 UniRef90\_E4P6U4 UniRef90\_UPI0003F4ACF5 UniRef90\_UPI0004782867 UniRef90\_B2JRW4 UniRef90\_UPI00046E829A UniRef90\_A8ZX26 UniRef90\_UPI000429C03A UniRef90\_E6SGB9 UniRef90\_Q83RF3 UniRef90\_C4ZIN2 UniRef90\_C7N5H8 UniRef90\_B7QY50 UniRef90\_UPI00047E7E95 UniRef90\_V5SAT8 UniRef90\_R1GFA5 UniRef90\_UPI00037FCB0 UniRef90\_UPI000464886C UniRef90\_C5AIL8 UniRef90\_I0IEY1 UniRef90\_UPI00036FC64C UniRef90\_UPI00047CBF00 UniRef90\_B9L6C0 UniRef90\_UPI0002557DBC UniRef90\_W4MC12 UniRef90\_C6B711 UniRef90\_UPI0003B416BC UniRef90\_UPI00036E16A UniRef90\_A4WMJ9 UniRef90\_C7QAY3 UniRef90\_D4BTF3 UniRef90\_M5EIS8 UniRef90\_J0L3Z3 UniRef90\_W7SFH7 UniRef90\_UPI00034891BE UniRef90\_W8HGG9 UniRef90\_V3TSE0 UniRef90\_I0KBW3 UniRef90\_B4SKD4 UniRef90\_W3RSJ6 UniRef90\_W6X065 UniRef90\_Q3AAD3 UniRef90\_Q5GZ28 UniRef90\_UPI00036D0224 UniRef90\_UPI000371817E UniRef90\_D7AE91 UniRef90\_UPI000423D59D UniRef90\_Q5Y816 UniRef90\_UPI0004742D98 UniRef90\_UPI0003C7E263 UniRef90\_A0A023V2Q63 UniRef90\_X2NFQ8 UniRef90\_J8W1X3 UniRef90\_Q1QFI6 UniRef90\_UPI0003B668ED UniRef90\_M3E3X0 UniRef90\_D6KAL0

P A D A V G T G L T G R G H N N A W Q S R V R G L P E T A G E L P V S A L  
R G F I Y S N R I L L P R N Y V R G I S L R K K G G Y R I T H  
L T G N I G K R G A G V C D A G G A R Q M A K F P A P A V K K I T P I P V A K A V  
Q G D R T M G I W E K M P E A F L A A L D A R F F G I T S P R K H G H D T V D G I  
Q G N R T V G I T E K P S P A F L D A L G K E F S F E P P T P H G A D A  
V N G L D L I D P R Q R E K A L G Y A E R P L G P P A Q G W I A G R D L Y E A I  
Q G N R T M G I D E K P S A A L L D S L A A H F A F T P P R G A G H N T V Q A I  
K R P  
Q G N R T M G I N E R P Q K S F L N A L G S Y F S F N P S E E P G H C T V T A L  
Q G D R T M G I W E K M P E A F L A A L D A R F F G I T S P R K H G H D T V D G I  
N S K H T I Q A I N T I M A I T G N I D V Y G G N M W V P F W N E M L G P R L A  
K A P D F W P K P S F S T H K F A E C V L M R E K F D Q G E V T E K E F R N A  
R D R G L A F D D I P R T P V S G A A I V S G L I P C N A I  
Q G G Y Y D M T W N P P N G M Y K Q P E E P N Y R I N I N E V W T G I L D G E F  
Q G N R T M G I N E K P K A E F I D R L E Q Y L G C Q L P R A A G H N V  
Q G D R T M G I N E H P S Q A F L D A I E K R F N F T P P Q K H G L A V V D T I  
Q G D R T M G I N E R P S R A F L D A M E K R F H F T P P Q H E G L A V V D T I  
Q G A R T V G I W E K P P A A L L D S L E R D V F G F E P P R V H G H T V  
Q G D R T V G I N E K P P A A L L E N I E K A L G F A P P K A H G H N V V N A L  
Q G D R T V G I D E K P T P A Y L D K L Q E V F G F A P P R E H G H H V  
Q G N R T V G I T E K P S S Q F L Q N L Q D V F G F T P P R E H G H D S V R A M  
Q G N R T V G I T E K P S A A F L S R I E E V F G F T P P S K H G H D A  
A D L W D S D K W G N R K L S L P T  
M G G R E V G G L A T T L A V H L D F E A E S I E F W K T S G I K N R K R G L T S  
Q G D R T V G I D E R P T P A F L D R L E K V F G F K P P R H G Y D V V A T I  
L N R P R P S T P A A P S P L L S P A  
Q G V N D M G V V P E F F P G Y S T T S D V S N R E N I E K L W G V K F S D D  
Q G N R T V G I T E E K P S Q A F L D R L G H V F D F E P P R H H G Y D V  
Q G D R T M G I N E R P S D A F L D A M Q R H F N F T P P R N H G L A V V P T I  
Q G D R T V G I D E K P G A A Y L D R V R E V F G F E P P R A W G H H V V E S V  
G G Q N T W P V I T K P P A L M F D R W R S R V R G L P E A M G E L P A V C F  
T P R R A Q V N P M K L W G E G Y P A S R F R G L T H L M F E M P C N A L  
F T A K A Q A H P P Y E G W G Y G E R L R V R G L T D A V C G M P T A A L  
P R A A A P G K G F A L G R W A S R V S G H P E A K G E L P T A A L  
Q G D R T V G I T E I P S E S L S N S L E K V F G F K P P A K H G H S A  
G V I E W F P M L E N P V K T Q I L S V F T W T D A I D H G T E M T A P R D G V R G  
Q G D R T M G I Y E K P A P A F L D A L E A E F G F A P P R A H G L D T V G A T  
Q G N R T C G I T N A P T P E F L D K L A E V C G I D P P R Q E G L D V V S T I  
Q G Q R T V G I T E K P E L A P L D Q L A K Q F S F E P P R K K G L N T  
M G G R E M G Y M G P G L P G Q R S V L D E A D R R F I E E M W K L P E G T L R  
D D N N W R T Q T T D F P A I D G F Y P P N V M P  
Q G D R T V G I D E K P T Q A Y L D R V R D T F N F E P P R E H G H H V  
Q G G A E M G A V P N S Y G M G R P V G D P A T M A A M R E I W P E E P G L T A  
Q G D R T V G I T E K P S A E F L D R L G E R Y G F P P P H A P G H A A  
C L P R G M G W P Q N P Q P L G A R H D S V L A H P P E Y P L A S H K V S H L  
D G T T V D F G E S F G A Y V G A I L S P Y S V D P E G F K A A R V F K S S E M  
K T P A R L Q G D H L I D P D T R V I N I L D V I A R K M L D P Q M R  
Q G D R T V G I T E K P N A A L L D G I R R V Y G F E P P S A H G H D A  
Q G D R T V G I N E K P P A A F L D A L E R E L G V S M P R R N G S H N V L A A T  
Q N T R E C G F R N W A N D S H V A E L A A L W N V D A G K I P H Y G P P T H L  
Q G D R S M G I W E K M P D F L D R L D R E F S F V S P R E H G I D A  
Q G D R T M G I W E Q M P D E F H D A L D A E F T I T T P R A H G Y D T V Q A T  
Q G N R T V G I E E K P G A A F L D R L G Q V Y G F A P P P R R H G Y D V V E S I  
Q G D R T M G I T E R P P A A L L G N L Q R R F G F Q P P R E H G L D V V E S I  
Q G D R T V G I S E R P S Q A M L D R L Q E V F G F E P P R G H G H S V V E S I  
Q G N R T C G I D H R P P P E L T D R M D E L Y A F T P P R R P G L D V  
D N A A T R I D I A T N P K G E Y P L L N P T K G S W Q I F R N K V H E I N T K  
Q G D R T V G I N E K A P A A L L D A M E K E L G V P L P R E K G H N V A Q A I  
G L L D Y T A L L H Y R A F N I S G A E M R H L Q D R S I R K V N M V Q L G  
Q G D R T V G I T E I P N K A L L D G M E R A F G F R P P S D K G H N A  
Q G D R T F G I W E K P G E P F L Q R L D A E F G M T A P R Q H G Y D S  
P K G P E N L P K A R K L A I A D G P K G A A A L P T H H M S H Q V L K M T K D  
D F A Y L R G L H K V A K P S R V V  
Q G D R T M G I Y E K P K D A F L D A M E A E F G V P M P R E H G L D T V D A I  
Q G D R T V G I T E K P S A S F L D K T I E Q R F G F K P P S E F G H A A  
Y V R P S D A H V G R P A A Y V D K L I E G K G G V H H I W A C D H Y K T L  
Q G A C D V G M L P Y Y D P D Y E H P K E V G M M T  
Q G D R T M G I Y E K P A E K F L S A L D T E F G L T S P R A H G Y D T V E A I  
Q G D R T M G I Y E K P A S F L D R L G E V F D F A P P R A D G Y D T V G A I  
Y V P V A Q A K S P D R D W A L Q G R V R V R G L R K T R A G M P T A T L  
Q G D R T M G I W E R P E A A F L D S L K K E F N F E P P R E H G L D T V D S I  
Q G D R T V G I D E K P K P A Y L D R V Q R V F G F D P P R E H G H H V  
Q G Q R T V G I S E K T K L V P L D R L A E L Y H F E P P R Q D G L T T  
Q G N R T V G I E E R P T A E F L D R L A Q V Y H F E P P R G Q G L D V V E T V  
R L K V N K W W F P E G K K A K W Y P W L Y I L H G P T E N  
Q G D R T M M L Y E K P P A A F L D K L Q S S G F A P P R A D G F D T V G A I  
S Q G V N D M G C T P E F L P G Y S P I T D S S A L W G V D S L Q F S S D N P A  
Q G N R T C G I D H R P E P E F L D R L A E V C K I N P P R D H G L D T V G T L  
Q G Q R T V G I T E D P K K I P T Q L I E Q H F G F K V P E Q P A A D L G I H P T A N G L N A  
D A Y V D E I A E K G N N M P R A D F G G R K L E M P A M N S G R P K P T N T T  
Y A R P P Y P G D S K I Y V D R E I S G K G M M Y T V W G T N P P F Q S T L N A  
Q G D R T M G I W E K M P D F R E Q A L G A E F D F E P P A H D G Y D S  
Q G D R S V G I N E A A S E E F L Q R L E A H F A I S V P R K H G R S S V E S T I  
K L A G E K V A P K N M P K P T A Q R I D L V A P Q F K Y I A A G G V V Q S L  
Q G Q R T V G I S E K P E L V P L D R L A E Q V G F D P P R D E G L N T I K A  
Y S R P S D A H V G R P A A Y V D K L L M E G K G G V H H I W G C D H Y K T T L  
Q G D R T M G I W E R V S A E F L D S L E K E F K F S A P R E D G F D V  
Q G D R T M G I W E K M P D S F L D S L Q E E F G F D P P R H H G L D S V N A I  
Q G D R T M G I F E R P A P A F L D A L E K E F G F A P P R E H G Y D V V R A I

UniRef90\_R7XV69 REEITTPGAGQIVRAMLTLISGNPVVLSSTPDGARLDEALAGLD  
UniRef90\_B5IF98 MELADYIIEDEKIKFVFIYGTNPFAATLPNQKRLRDAVLSGDV  
UniRef90\_U2M8B0 GEVWVNDRPIKFWWIMTGMVMTQLPNTNMVIRKALKEKVP  
UniRef90\_F0M2V7 VETIRQMLPDYGGIKVFIAMGTFVGAAMS DTRAAEAAMEGTE  
UniRef90\_G8WDL8 VKALQAMLDGE SKALLLGLGNGFVAVAMP DSERAFPA MRGLD  
UniRef90\_W0HXP8 LTKGPYA IEGMLAFGTNLVLSQGD TALGV EALTKLP  
UniRef90\_W0HXS2 EA MLRDE V KVLITLGGNLA A A A P D T P R T E D A L Q R C A  
UniRef90\_D9WEZ7  
UniRef90\_U3U9N9 QE M L N N K V K V F I S L G G N F A S A A P D S L L T E K A L K Q C G  
UniRef90\_W9BH80 RAMRDGGRAKTF IGM GGNFVSA TP D T A V T E A A L R N C A  
UniRef90\_I4A7L9 GMPPESSHAQKRLS NF K H Y P N S H P T Q V W D A T L T G K P Y P T K A  
UniRef90\_Q24N20 V G C P P D A P L P N I H L L W L D N N Q L N N H Q Q V N K R L J E A V Q K V D F  
UniRef90\_F5YSK5 P D E L L T E H P D R F R A V I V E S S N P L H S L A D S V R M T E A F R A L E  
UniRef90\_D0WIN8 T V I G N G E K K P C N V Q M I Y D T H E N T L N Q A P G T M L G I E A Y R K V E  
UniRef90\_A0KWD4 V E A L K A L D S E Q S K V F I C L G G N F A A A A P D S A F T Y N A M G K T Q  
UniRef90\_X7E7C5 RA MRD G K V K V F V A L G G N F A S A T P D T K A T E K A L K R C Q  
UniRef90\_F6CU45 RA MRD G K V K V F V A L G G N F A A A T P D S Q A T F A A L E K C D  
UniRef90\_B8H4C9 V E A I A A M E Q G R A K V F I G L G G N F A V A A P D T R T R F A A M R Q L D  
UniRef90\_F0LX46 QA MRSGESK V F I G L G G N L V A A A P D T A L V I A A M R N C E  
UniRef90\_K5YPY8 V E S V K A M I E G S A K V F I G M G G N F I H A I P D T F A A Y E A M R R L N  
UniRef90\_U5E3G6  
UniRef90\_W0PIX0 Q A M I D G Q A K A L L C L G G N F A V A M P E S E R S F Q A M K Q L D  
UniRef90\_A4WBD6 V Q T T Q A M I A G Q S K A L I C L G G N F A V A M P E H E R V F P A M R K L D  
UniRef90\_B8FTZ6 L P V N H G D D G A D I V E M L W I T Q S N P L V Q Q T H L Q K L R E L M G N L D  
UniRef90\_D5V5N2 C E I V D E A L K G N V I E V L I S H T D P I Y H L P N R A K V E K A F R N I P  
UniRef90\_UPI00037A5144 QA M L D D K V K V F I G L G G N F V M A S P D T D R V F A M R A C N  
UniRef90\_UPI00046D6367 I A R E L P R A R P F V R F A W V A G S N L L N Q A P D A K A L A E A F L R V E  
UniRef90\_I3IP17 I F R K E P K N I F E L V K G L Y I M G E N P L V S Y P N G K E L L E A F O K T D  
UniRef90\_A0B0Y7 V E T I E G M L D G H V K V L I G L G G N F A M A T P D T P R T W E G M R R C E  
UniRef90\_F2JWR7 QA M L D G K I K A F V A L G G N F A V A T P D S E L T S K A L S N C D  
UniRef90\_A0A023D2N5 E A M I A G R A R V I G L G G N F I H A I P P E T A L A Y E A M R R L N  
UniRef90\_M2W833 A E E I L T P G P G R T R A L I T L A G N P A R S L P N S G A I E D A L D A L L E  
UniRef90\_W9BRN4 A D E I L T P G P G Q T K A L I S I G G N P M L A F P D Q D K M A R A I E A L D E  
UniRef90\_G8RS35 A D E I L T E G D G Q V K A L I S I G G N P M A A W P D Q R K T M R A I E S L E  
UniRef90\_NOCKL4 A E E I E T P G E G R I R A L V V L A A N P V L S A P D G D R L D A A L A G R D  
UniRef90\_D4GEI4 V Q A V Q A I R D G K L N A L L C L G G N L A E A M S D P Q V T F P A M R K L D  
UniRef90\_E4P6U4 K E K L D V P I K F L W C Y A S N T L I N Q H G D I N H T H Q D D S K C C E  
UniRef90\_UPI0003F4ACF5 R A M R D G A A K V F F G M G G N F V R A T P D S A V T E A A L R N C R  
UniRef90\_UPI0004782867 E A M D R G D I K V F V G M A G N F A L A S P D T R F T Y A S L R K V D  
UniRef90\_B2JRW4 V E A F E A M V K G N V K A V V N L G G N L V R S V P D R L Q T E P A W A R L R  
UniRef90\_UPI00046E829A T E M F E S M K S G D I K A C W I L C T N P V A T V P N R K N V I A G L E A A E  
UniRef90\_A8ZX26 E E I L S D H P E R L R A V I T C N S N P L R S Y A D T P A Y E T A F K K L D  
UniRef90\_UPI000429C03A V E S V E A M I D G R S K V F I G M G G N F I H A I P D T I I A Y E A M S R L D  
UniRef90\_E6SGB9 T A A I D A M Y R G E I D V L Y S A G G N F L E T L P D P A Y V R A A L E R V P  
UniRef90\_Q83RF3 I A S M Q A I C T G Q A R A L T C M G G N F A L A M P D R E A S A V P L T Q L D  
UniRef90\_C4ZIN2 V P F W I A E G R K I N V A F T Y Q D N P V Y T Q A V W G K L Y R D E K L I P  
UniRef90\_C7N5H8 Y D A A I T H N P V P I D F L Y I A T S N Y I N Q S P D A H K V I D E V F P A I  
UniRef90\_B7QY50 L P I R A V M I Y N H N P V A T H P D Q A R L E A L S Q E D I  
UniRef90\_UPI00047E7E95 V A A V K A I G E G R S K A L L C L G G N L A V A M S D P Q A T F P A M R Q L D  
UniRef90\_V5SAT8 G A M L D G S A Q A F I G L G G N F A R A T P D S S L T I E K A L R N Q K  
UniRef90\_R1GFA5 M Q M L R Y A E T G L R F L W V S A T N P A V S L P E L H R I R S I L D S S R  
UniRef90\_UPI000376FCB0 A D T V H R L R A G A V R V F I A M G G N F A M A T P D T D V V H E G L R S C D  
UniRef90\_UPI000464886C R A M R D G K A S V F I G M G G N F A S A T P D T A V T E D G L R Q C A  
UniRef90\_C5AIL8 E A L L D G R V N V F I G L G G N F A M A T P D T P R T W E G L R R C A  
UniRef90\_I0IEY1 H A M E R G E V D V F I G L G G N F V S A T P D T A R T S A M R R V G  
UniRef90\_UPI00036FC64C A A M R D G A S K A I V C L G G N L A F A C S D P Q A C T E A F E K V D  
UniRef90\_UPI00047CBF00 V R T V Q A M H E G K V K V F V S L A G N F A L A C P D T A Y T F E A L R C D  
UniRef90\_B9L6C0 W K K G E K L A D Y P V R G M F I Y R E N P M Q S V P G Y E K T A E M F D T M D  
UniRef90\_UPI0002557DBC G A M L D G S A R A F F A L I G G N F A R A V P D S T L V A Q A L G R L D  
UniRef90\_W4MC12 Q A L T D P A M A P P H A L V V Y N S N P A A I A P N Q K L V L Q G L R R A D  
UniRef90\_C6B711 I E A V I E A A I D G R A K A L C L G G N L A V A M S D S G A T F S G M R N L D  
UniRef90\_UPI0003B416BC T E A M R A M A R D E V D V F V S L G G N L A L A N S D T A L M E D G L K R T G  
UniRef90\_UPI00036EE16A G S A G R P E I Y I C Y K Y T P A Y A N G N V Q E N I D I L K D E T L A P F H V  
UniRef90\_A4WMJ9 P M G V V G G V I E E F R V V Y V W N A N P V L T V P Q G D R I A K A E R G D  
UniRef90\_C7QAY3 R A M R D G R A K V F F A M G G N F V A A T P D T A V T E A A L R G T A  
UniRef90\_D4BTF3 V A S M Q A I S E G K A N A L I C M G G N L A V A M P D K D A C F A G M K K L D  
UniRef90\_M5EIS8 N A H Q F N M V Y K K R T D I V K D A M N A V P Y G D R E A M V K A I T D A I  
UniRef90\_J0L3Z3 P D I F K A I L S D E I F G I W N M G E D L A H I H S N L N M V H E A L K K L E  
UniRef90\_W7SFH7 H A M R D G K A K V F F A V I G G N F V S A T P D T E V T M R A L K S M D  
UniRef90\_UPI00034891BE G A M L J A E P K V F F A M G N F A A T P D T A V T E R A L K Q C A  
UniRef90\_W8HGG9 P E E I L T P G E G Q V R A L I S W G G N P A V A F P D T Q R Q T V E A L E S I E  
UniRef90\_V3TSE0  
UniRef90\_I0KBW3 K A M H E G K T K V F F S L G G N L L A A G P D T E F V A E A M R K Q S  
UniRef90\_B4SKD4 V E S I E A M L D G S A K V F I G M G G N F I H A V P D T P R A Y E A M R G L E  
UniRef90\_W3RSJ6 V D A C E G I L N G R V R A F V S L G G N F V R A V P E R S L M E P A W S N L K  
UniRef90\_W6X065 E G M L E G H V K V F I G L G G N F A M A T P D T Y R T W D G L R A C D  
UniRef90\_Q3AAD3 M V A P K P K N G I K A L I F G W H N P F D Q H N M A N R L R E M V J E K G E L E  
UniRef90\_Q5GZ28 E A M L D G R G K V F F A M G G N F A A A T P D T A T H R A L R N C E  
UniRef90\_UPI00036D0224 N D L L R N C A D G T I K V F H I A G E D P V H S F Y K G S E I K N A L Q T V P  
UniRef90\_UPI000371817E Q A M N R G D V K V F I G M G G N F A L A V P D S P F S Y E A L R N C D  
UniRef90\_D7AE91 Q A I L A G C S A G S I K T L Y V I G G N F V S Y P N R K Q V I E A L D A V E  
UniRef90\_UPI000423D59D V D A C E G I L D G R V R G F I G L G G N F L R A I P D T S R M E P A W R G L A  
UniRef90\_Q5Y816 A D S I L N D D P Y G L K V V M S Y W T N F N Y S N Q G S D R W D E A L A K L P  
UniRef90\_UPI0004742D98 E E H Q A A V R R R A Q I V R D A M R G A R G A S T D Q M I E V A Y D A V K N K  
UniRef90\_UPI0003C7E263 V E G V R A M R D G K A S V F I G L G G N F V R A M S D S D V T E A A L R R C R  
UniRef90\_A0A023V2Q6 R A I E R G E A K A L I C M G G N L A V A M P Q P Q R T F A A M R N L D  
UniRef90\_X2NFQ8 I D S A L T Q K P Y I K A W I M S R H N P F Q T V T C R S D L V K T V E Q L D  
UniRef90\_J8W1X3 C H K I L S G E L K A V I G L G G N F I R A I P E R E R M E A W T R L R  
UniRef90\_Q1QF16 N A F K F K Q T Y K R R T D M V K D A M M T A S Y G D R A A M V N A I V D A I  
UniRef90\_UPI0003B668ED V E S I K A M V I E G K T K V F F S L G G N L L A A G P D T E L I A E G M R K Q N  
UniRef90\_M3E3X0 R A M L E G R V K F F S L A G N F V R A A P D S M V T E E A M R A C R  
UniRef90\_D6KALO R A L R D G E A K V F F A M G G N F V S A S P D T D V T E A A M R A R

UniRef90\_R7XV69 F M A A V D I Y V N E T T R H A D V I L P P T G A L E R D H Y D F Q T F A V R N 450 460 470 480  
UniRef90\_B5IF98 F I V L H D I F L N T D T A L F S D I F L P S N T F F E R V D I A D S Y Y H R N  
UniRef90\_U2M8B0 F V V V A D N L M S S T A L G Y A D L V L P V I T T I F E D V D S L R M A G S V R S H  
UniRef90\_F0M2V7 L S V Q I S T K L N R S H H L V T G A E A L I L P T L G R T E I D R Q E S G R Q S  
UniRef90\_G8WDL8 L S V H I S T K L N R S H L V I A N E T F I L P C L G R T E L D I Q E T S G R Q S  
UniRef90\_W0HXP8 F Y A H C D L F L N P S A H Y A D V L V P V N T P W E R E G L R I G F S R A E T  
UniRef90\_W0HXS2 L T V H I S T K L N R S H L V P G H D A L I L P T L G R T D R D T Q A S G D Q Y  
UniRef90\_D9WEZ7 L T V H I S T K L N R S H L V P G K E S A L I L P A L G R T E R D Q Q K S G N Q Y  
UniRef90\_U3U9N9 L T V Q I S T K L N R S H L V H G R T A V I L P T L G R T D K D F Q R A G K Q L  
UniRef90\_W9BH80 Y I S V Q G N P I S W S E N S N K V V E A L H K L D F L V V M D Y F M S P  
UniRef90\_I4A7L9 V T G F Q W H F N S P S V Q Y M D L V L P A P N H M G Q Q R F M N G P C A A R N  
UniRef90\_Q24N20 L V V V I D I A M T E T A R E A D Y V L P P P T Q Y E K Y E T F F D F E F P R N  
UniRef90\_F5YSK5 F V V A Q N I V M T T A C K Y A D V L V P V I T T Q W E R Y G D F T A G Y R E  
UniRef90\_D0WIN8 L N V Q I S T K L N R S H L Q V G K D A L I L P C L G R T E L D K Q  
UniRef90\_A0KWD4 L T V Q I S T K L N R S H L I M G K E A I L L P C L G R T D V D H H Q A T G  
UniRef90\_X7E7C5 L T V Q I S T K L N R S H L I T G K E A L I L P C L G R T D I D H Q A N G A Q K  
UniRef90\_F6CU45 M A V H I A T K P N R T H L V I G K A A L L L P C L G R T E M D M R G G V R Q S  
UniRef90\_B8H4C9 L T V N I A T K L N R S H L V N P G K D S L I L P C L G R T D I D I Q A A G P Q K  
UniRef90\_F0LX46 L T V N I A T K L N R S H L V N P G K D S L I L P C L G R T D I D I Q A A G P Q K  
UniRef90\_K5YPY8 L T V G I A T K L N R G H L V H G K Q A L I L P V I A R S E I D N Q A S G P Q F  
UniRef90\_U5E3G6 L S V H V G T K L N R S H L L V A R E T F I L P C L G R T E L D I Q A G Q S V T  
UniRef90\_W0PIX0 L S I H V G T K L N R S H L L T A K E T F I F P C L G R T E L D M Q L T G K Q S  
UniRef90\_A4WBD6 L T V G T D F L T S T S R C H D I V L P A A T F L E A E D L V A G E W H R  
UniRef90\_B8FTZ6 I V E I N A Y E N S T S E F S H I R L P A S P W G E K D G T Q T N M D R  
UniRef90\_D5V5N2 L T V H I T T K L N R S H L V H G R D A L I L P T M G R T E I L  
UniRef90\_UPI00037A5144 T R V V Q D A F W T E T A R H A T V V L P P A L W L E E E D L V G S Y W A N  
UniRef90\_UPI00046D6367 F T V V V Q D V F L T E T A R L A D V V L P T V T T F A E K E G T F T N M G M  
UniRef90\_I3IP17 L S V H I T T K L N R S H L I H G R D A L I L P T L G R T E I D L Q D N V A Q G  
UniRef90\_A0B0Y7 L N V Q I S T K L N R S H L V T S P N S Y I L P C L G R T D I D M Q N G V P Q  
UniRef90\_F2JWR7 L T V G I A T K L N R S H L V H G R D A L I L P V I A R S E I D R M Q A T G E Q F  
UniRef90\_A0A023D2N5 F M V S V D C Y L N E T T R H A D V I L P P P P V T T R G H H D V T L S H F Q I  
UniRef90\_M2W833 L E V S V D I R A E G S A R R S D Y I L A P L M S L E R D D I S S E W W Y E I P  
UniRef90\_W9BRN4 L L V T L D T E M S L T S R L A H Y V I A P M M Q M E T P A M T M  
UniRef90\_G8RS35 F M V S V D P Y L N E T S R H A D V V L P P P P S Q S A H F D F A F N S F A V  
UniRef90\_NOCKL4 M V V H M A T K L N R S H L L L A K H S Y L F P V L G R T E I D R Q Q S G A Q S  
UniRef90\_D4GEI4 M I V G I D H F M T A S A K Y C D I L L L P D L M P T E Q E D I S H E S A G N M  
UniRef90\_E4P6U4 L T A H V S T K L N R S H A V T G E Y A L T L P T L G R T E R D V I Q E S G A Q F  
UniRef90\_UPI0003F4ACF5 L T V Y V S T K L N R S H L V H G K R A L I L P C L G R T E K D I Q R G  
UniRef90\_UPI0004782867 L T V N V A T K L N R S H L V H G E V S Y V L P C L S R I E I H R T P L G  
UniRef90\_B2JRW4 L V I T Q D A F L D E T N R F A D I L L P G A L W S E A E G V M I N S E R  
UniRef90\_UPI00046E829A L L V C I D I V M S E T A E L S D Y V L P R S G F E G W D G C F F S L T H P E I  
UniRef90\_A8ZX26 L T V G I A T K L N R S H I V H G K D A L I L P V I A R S E I D R T S A G E Q F  
UniRef90\_UPI000429C03A V K V F Q D P M M L L E P A D V N V I L P A A T R Y E T P G G V T Q T T T E R R  
UniRef90\_E6SGB9 L A V H V A T K L N R S H L L T A R H S Y L P V L G R S E I D M Q K S G A Q A  
UniRef90\_Q83RF3 Y F I S M S S H M G E E T A L A D I I L P D C P Y L E R W E P E S M P N S L W P  
UniRef90\_C4ZIN2 D F I V I T D P F M T W T A Q Y S D V V L P V I A T W L E T W D L S T Q G A Y L R V  
UniRef90\_C7N5H8 F V A G S D V V M T D S M R M C D V I L P A S S H F E C N D V Y G A Y G Q N  
UniRef90\_B7QY50 L V V H V A T K L N R S H L L P A R A A F L L P C L G R T E I D L Q A A G P Q S  
UniRef90\_UPI00047E7E95 L T V N I A T K L N H S H L P G E V S Y V L P C L G R T E I D R N A K G A A Q  
UniRef90\_V5SAT8 L F V V Q D A F P T E T A E L A D V V L P A A M W G E K T G T F T N V D R  
UniRef90\_R1GFA5 L T V H V S T K L N R S H I V A G R E A L I L P T L G R T D H D H T A A N P Q  
UniRef90\_UPI00037FCB0 L T V Q I S T K L N R S H V V H G R T A L I L P T L G R T E R D S Q A S G D Q Q  
UniRef90\_UPI000464886C L T V H I T T K L N R S H L I H G S D A L I L P T L G R T E I D L Q N G V A Q G  
UniRef90\_C5AIL8 L T V H I S T K L N R S H L L K S G K T Y V L P C L G R T N V D E Q A S G R Q A  
UniRef90\_I0IEY1 L T V H V S T K L N R S H L V H G R K A L I L P T L R T S E K D R Q A G G V I C  
UniRef90\_UPI00036FC64C L V V V I D I P N D T A M Y A D V I L P D T P Y L E R T S P V K V G T L C Q  
UniRef90\_UPI00047CBF00 L T V N I A T K L N H G H L M P G K V S Y V L P C L G R T E I D R N S R G E R Q  
UniRef90\_B9L6C0 F T V H E A Q F M T D T A R Y A D Y V L P A T T Q V H L D L L W S W G H T  
UniRef90\_UPI0002557DBC L A V H I A T K L N R S H L L T A K T T L V L P C L G R T D L D I Q A S G  
UniRef90\_W4MC12 L T V H I S T K P N R S H V V H G R T S L I L P T L G R S D L D D H P G G A Q F  
UniRef90\_C6B711 N I N P F Y D E S A A L A D L I L P E P T Y V E R W D W E D M V S P V I Q  
UniRef90\_UPI00036EE16A I T A V H A P L L D E T A E A A H I V L P A P L Y I E K D V I Y S Y H N  
UniRef90\_A4WMJ9 L T V Q V S T K L N R S H A V H G R R A L V L P T L G R T E L D R Q R G R Q E Q F  
UniRef90\_C7QAY3 L A V H T A T K L N R S H L L T A K Q T F L L P V L G R S E I D R Q S S G V I C  
UniRef90\_D4BTF3 F S V D V D I I P S K I G A A S H V W L P A A E S G E M N L T S M N G E R  
UniRef90\_M5EIS8 I L I V N E V M L N E V T K F A D I L F G V K S G Y E K T G V Y V N A E R  
UniRef90\_J0L3Z3 L T V H V S T K L N M S H V V C G K V A L I M P T L G R T E R D D Q A A G A Q F  
UniRef90\_UPI00034891BE L T V H V A T K L N R S H L V C G D D A L V L P C L G R T E I D Q Q A G G A Q  
UniRef90\_W8HGG9 L F V Q I L D P W Y S A S A R L A D Y V I A P T M P L E A P S T T  
UniRef90\_V3TSE0 L T V F V S T K L N R G H L T T G R T S L I L P C L T H V D I D R Q T S G Q Q F  
UniRef90\_I0KBW3 L T V G I A T K L N R G H L V H G R D A L I L P V V A R S E V T P A G E Q F V T  
UniRef90\_B4SKD4 L S V Q I A T K L N R T H L V P A Q T T Y L L P C L G R I E I D Q Q A G G P Q  
UniRef90\_W3RSJ6 L T V H I A T K L N R S H L V H G K H A L I L P T M G R T E I D V R N G V S Q G  
UniRef90\_W6X065 F V V A I D F Q N S T S C Q W S D V V L P G V T W Y E K T E L T A T P V H P  
UniRef90\_Q3AAD3 L T V H V T T K L N R S H L V H G R D A L I L P C L G R T E I D I Q D A G S Q  
UniRef90\_Q5GZ28 F L V V Q D V Y M T E T A K L A D I L L P T T Y I E K E G I S F T N M T R  
UniRef90\_UPI00036D0224 L T V Q V S T K L N R S H V V H G K E A L I L P C L A R T D K D H S R N G V I Q S  
UniRef90\_UPI000371817E F L V V Q D L F L T E T A S K A D V V L P A C S F A E K D G T F T S L G G A  
UniRef90\_D7AE91 L S V Q I A T K L N R T H L V P A H N A W L L P C L G R I E I D R Q D G V E Q T  
UniRef90\_UPI000423D59D F M V H M T L H P A E Q T H F A D I L L P V A M F E R L S P V R G S N G N L Y R  
UniRef90\_Q5Y816 G G L F V A T V N L Y P T S L S E A A H L M L P A A Q S G E M N L T S M N G E R  
UniRef90\_UPI0004742D98 L T V Q V S T K L N R S H I V C G E T A L I L P T L G R T D R D V Q A S G E Q Y  
UniRef90\_UPI0003C7E263 L Q V H V A T K L N R S H L L L A K H N Y L L P A L G R T E R D I Q A T G S V T  
UniRef90\_A0A023V2Q6 L V V S C D V Y L S E S A Y A D Y L L P E C T Y L E R D E E V S D M S G L H P  
UniRef90\_X2NFQ8 L T V Q I A T R L N R S H L V N G E V A Y L L P C L G R S E E V S Q A T G S Q  
UniRef90\_J8W1X3 F A V D V A I V P T K I G E A C H V W L P A A T S G E A N L T S M N G E R  
UniRef90\_Q1QFI6 L T V F V G T K L N R G H L V T G K T S L L L P C F T H V D I D M Q R A G H Q M  
UniRef90\_UPI0003B668ED L T A H I S T K L N R T H I V C G R T A L I L P T L G R T E R D V R A G G E Q F  
UniRef90\_M3E3X0 L T V H V S T K L N R S H V V T G A R A L I L P T L G R T E R D V R A G G E Q F  
UniRef90\_D6KALO L T V H V S T K L N R S H V V T G A R A L I L P T L G R T E R D V R A G G E Q F

UniRef90\_R7XV69 T A R F T P A V F E K E P E A R H D W Q I Y R 490 500 510 520  
UniRef90\_B5IF98 Y I S F N D K L T K E I S G K S N S D V A R M L A K A M N L K E K T L Y E K D  
UniRef90\_U2M8B0 Y V Q L M E Q A V E P P G E A K P D Y W I F A R L A E R F G F G D V F N Q P I  
UniRef90\_F0M2V7 V S V T T V C A V H A S H G T V E P V A P G L L S E V I A I V C R L A Q R V L G D R  
UniRef90\_G8WDL8 I T V S M S M V H A S S G K L K P V A S P E L R S E P A I V A M A M A T L P E S  
UniRef90\_W0HXP8 L T Q L R P Q M V S S R G E A R S D N D I V F A L A N R L G L Q E T F F G G T L  
UniRef90\_W0HXS2 I T V S F S M V H A S Q G V N P P I S D Q L R S E T A I V A G I A A A V L G E D  
UniRef90\_D9WEZ7 I T V S F S M V H A S E G L G L P L T H T Q R S E I A I I A G I A Y N T L G N N  
UniRef90\_U3U9N9 V S V S M S M V H L S R G N L H P P S D Q V R S E V A I V C Q L A R T L L G P D  
UniRef90\_W9BH80 T A N L A D I V L P S A H W T E R D Y I A D E L C G R W F F G Q Q K A V E P L Y  
UniRef90\_I4A7L9 Y F L Y C R K M V D G P G E V R E P E W F W T Q V A K K L G V G E K Y N P R L I  
UniRef90\_Q24N20 L F H L R H P L L E A P A G Q L A E P E I H A R L C E L A G  
UniRef90\_F5YSK5 Q M L W T S Q V C E P L F E A K S D L D I A E L A E Y M G V D P E Q V R P L D  
UniRef90\_D0WIN8  
UniRef90\_A0KWD4  
UniRef90\_X7E7C5  
UniRef90\_F6CU45 V T V E D S M S M E D S F S M I H A S G G V L E P M S K Q K S  
UniRef90\_B8H4C9 V T V S M S M V H L S R G N L H P P S D Q V R S E V A I V C Q L A R T L L G P D  
UniRef90\_F0LX46 V T I A M S N I T A S R G V L E P A S A D L R S E I E I V C R M A M A T L G D N  
UniRef90\_K5YPY8  
UniRef90\_U5E3G6  
UniRef90\_W0PIX0 V E D S M S M V H A S S G K L K P A S E S L R S E P A I V A G M A M A T M P Q S  
UniRef90\_A4WBD6 I T V S M S M V H A S S G K L K P A S P H L L S E P A I V A G M A K A T L P D S  
UniRef90\_B8FTZ6 W I G L N E Q A I A P L I G E T R S E L E I A Q S L A V A I S E E A P G L C P F P  
UniRef90\_D5V5N2 T I T K Q K V T R T S L I D C K P D W E V F K L I A W E L G F K K S F D Y S T V  
UniRef90\_UPI00037A5144 H A T A L G P Q G V T V E D S M S M V H I S Y G I N K P A S P E  
UniRef90\_UPI00046D6367 T V G A V R Q V V D P P E G C R G D F E I V A E V A R R L G V E F P F D R D A  
UniRef90\_I3IP17 T V Q R L N K V I Q P S V D A K P D W Q L I C E L A K M G Y S Y S V P S K D  
UniRef90\_A0B0Y7 V T V S M S M V H V I S Y G M N K P A S P N L M S E P A I V A H M A H A L F G S G  
UniRef90\_F2JWR7  
UniRef90\_A0A023D2N5 V T I A M S N V T S S R G V L E P A S P D L R S E V E I V C R I A R A T L P E S  
UniRef90\_M2W833 R N V Y T P P L L D L A D G E M A E W E I L L R A I A R G T P D R S V D E I D D  
UniRef90\_W9BRN4 Y A R Y T E A I L L P R P G D L L D E Y E M L W G L A K R L G  
UniRef90\_G8RS35  
UniRef90\_N0CKL4 H N Q V R Y T P A P V P L E G G R M D E S E I H A R L I S G M H G A P P S A V D  
UniRef90\_D4GEI4 V T V S M S M V H A S R G T L D P A S P H L K S E P A L V A G L A K A T L P G T  
UniRef90\_E4PJU4 Y V I L J R M P A T S A K F E R K P I Y W M L S E V A K R L G P Y Q T F T E G R S  
UniRef90\_UPI0003F4ACF5 V S V S M G M V H A S R G R L A P A S E H L L S E V I A I V C R L A R A A L P A S  
UniRef90\_UPI0004782867 T P Q R L S V I E D G D S M V H L S Q G N Q H P A S P Q L L S  
UniRef90\_B2JRW4 D Q A V S M E D S T G C M H G S R G A E P A S K A R P  
UniRef90\_UPI00046E829A N L T M M Q K A V E P P G E A L P D W Q I T A R V A C E M G Y S E A F S Y S S  
UniRef90\_A8Zx26 Y F Q M R H P F I V P E G D T L E A G E I Y T R I A D N I G  
UniRef90\_UPI000429C03A V T I A M S N V T S S R G V L E P A S P D L R A E V I E I V C R I A R A T L P D S  
UniRef90\_E6SGB9 V I F S P E I P G R I G E A R P E W E I P V R I A E R V F P E R A H L I R Y E  
UniRef90\_Q83RF3 V T V S M S M I H A S R G V L K P A G V M L K S E C A V V A G I A Q A A L P Q S  
UniRef90\_C4ZIN2 W L G I R Q P V H K S L G E S R E N R V L R D I I W K  
UniRef90\_C7N5H8 N K P V I D R I G E A M S D T E I M T M L S K R V G C E D A W D K T D E  
UniRef90\_B7QY50 Y L Q R A P V I A Q V G E S L P N T E I F R R L A A R F G Y D T P E F R D S D  
UniRef90\_UPI00047E7E95 V T V S M S M V H A S Q G R L R P A S E H L R S E P A I V A L A R A T L P Q S  
UniRef90\_V5SAT8 I E D S M C M V H G S G G I N K P A S P E L R S E V I G I A G I A A T V G S D  
UniRef90\_R1GFA5 T V H L S E K A V E P P G Q A R P D L D V F L D Y A R R M D F R G N D G E P F P  
UniRef90\_UPI000376FCB0  
UniRef90\_UPI000464886C V S V S M S M V H L S R G R L D P A S P Y L R S E V S I V A R L A I A L L G P D  
UniRef90\_C5AIL8 V T V S M S M V H V S Y G M N Q P A S P N L L S E T A I V A R M A M A L F G P D  
UniRef90\_I0IEY1  
UniRef90\_UPI00036FC64C V T V S M S M V H A S R G F L K P P G E N V R S E P W I V A M I A K A T L G Q K  
UniRef90\_UPI00047CBF00 V T V S M S M V H R S T G M K R P A S G R L R S E I A I L A G M A R A T L P D S  
UniRef90\_B9L6C0 P V I G Y R S A M E P M Y S T K P L Y I L M  
UniRef90\_UPI0002557DBC M E D S M S M V H G S G G I N L P A S K E L L S E V R I I A G V A K A T L G S E  
UniRef90\_W4MC12  
UniRef90\_C6B711 R Q A V T V E D S M S M V H A S R G F L H P P G E V R S  
UniRef90\_UPI0003B416BC L S V E N S M S V I S K T Q G R P V S D H L L G E P V I L A R M A E A I F G P D  
UniRef90\_UPI00036E16A P E F Y I R Q A V K P M G E T R D F G D V V C E L A E R L G T P L G Y A S K E E  
UniRef90\_A4WMJ9 Y L V Y N A A V A E P P G D A R R E T W V V K K L A E L L G V G D H P L R E E  
UniRef90\_C7QAY3 V T V E D S M G L V H A T R G R P A S E A L L S E V I A V A R L A R T V L G A Q  
UniRef90\_D4BTF3 V T V S M S M V H A S K G L L K P C S P Y L K S E C A I I A G L A K A A I P Q S  
UniRef90\_M5EIS8 R M R L V E R Y M D P P G N A K P C S M Q H M E K V L R E M G D N A Y A D Q F K  
UniRef90\_J0L3Z3 R L H L S Q P L V K S D L P D D W E I T Q G V E N E F L G N W S Y T S S E N  
UniRef90\_W7SFFH V T V E D S M S V V H R S R G R P A G P A L L S E V I A I V S R L A R A V I F G S S  
UniRef90\_UPI00034891BE A V S V E D S M S M V H L S S G I N A P S S A S L S  
UniRef90\_W8HGG9  
UniRef90\_V3TSE0  
UniRef90\_I0KBW3 T S C E N S M V V S Q N K G V L E P L D Q M L S E V A I T S G V A I A T L G S R  
UniRef90\_B4SKD4 I E D A M S N V T A S R G V L E P V S T D V L P E V E I V C R M A M A T L P H S  
UniRef90\_W3RSJ6 A V S M E D S T T C I H G S R G Q R P I S K H L L S  
UniRef90\_W6X065 V T V S M S M V H I S Y G M N T P A S K H L M S E T A I V A N I A H A T L G D S  
UniRef90\_Q3AAD3 Y L Q L L Q Q P A I K P L Y N C K P E L W I F R E L A K R I N P E F H F F P G L D  
UniRef90\_Q5GZ28  
UniRef90\_UPI00036D0224 H V Q K V T T A T S P Q N Q S R T D H D I F V Q L A E V F G N K L K N S S V A E  
UniRef90\_UPI000371817E T S V E D S M S M V H L S V G M K R P A S K H L L S E P A I  
UniRef90\_D7AE91 Q V R V N R A I T P L G D C R S D F D I L N M L H A K L T G Q A Y T S Q K E  
UniRef90\_UPI000423D59D Y T T E D S T G C I H G W K G S A E P V G P H V I R A  
UniRef90\_Q5Y816 H V H M Q T G V I E S P F D V K I D E T E V P W M L G E A L E R K G F S N L I D  
UniRef90\_UPI0004742D98 R I R L T E K F T D P P G S A R P D C N E L R A L Y E R E G R M V S R F S G F D  
UniRef90\_UPI0003C7E263 I T V E S M S E V S A S R G K L E P A S P D L L S  
UniRef90\_A0A023V2Q6 V E D S M S M V H A S C G A L K P A S R W L K S E P A I V A G I A R A T L P L S  
UniRef90\_X2NFQ8 A Y A L R Q Q V V E P I G E A R P S W Q I W K E L G E Q L G L G Q Y Y P W Q D M  
UniRef90\_J8W1X3 A V T M E D S L S C I H G S L G K N T P A S E H R S  
UniRef90\_Q1QFI6 R M R L T E K Y M D P P G Q A M P D S L I A A R I A N H M G K Y A D Q F K G F N  
UniRef90\_UPI0003B668ED T S C E N S M G V V S Q N K G P L A G E M L S E V A I T S G V A I T L G D R T  
UniRef90\_M3E3X0  
UniRef90\_D6KALO

UniRef90\_R7XV69  
 UniRef90\_B5IF98  
 UniRef90\_U2M8B0  
 UniRef90\_F0M2V7  
 UniRef90\_G8WDL8  
 UniRef90\_W0HXP8  
 UniRef90\_W0HXS2  
 UniRef90\_D9WEZ7  
 UniRef90\_U3U9N9  
 UniRef90\_W9BH80  
 UniRef90\_I4A7L9  
 UniRef90\_Q24N20  
 UniRef90\_F5YSK5  
 UniRef90\_D0WIN8  
 UniRef90\_A0KWD4  
 UniRef90\_X7E7C5  
 UniRef90\_F6CU45  
 UniRef90\_B8H4C9  
 UniRef90\_F0LX46  
 UniRef90\_K5YPY8  
 UniRef90\_U5E3G6  
 UniRef90\_W0PIX0  
 UniRef90\_A4WBD6  
 UniRef90\_B8FTZ6  
 UniRef90\_D5V5N2  
 UniRef90\_UPI00037A5144  
 UniRef90\_UPI00046D6367  
 UniRef90\_I3IP17  
 UniRef90\_A0B0Y7  
 UniRef90\_F2JWR7  
 UniRef90\_A0A023D2N5  
 UniRef90\_M2W833  
 UniRef90\_W9BRN4  
 UniRef90\_G8RS35  
 UniRef90\_N0CKL4  
 UniRef90\_D4GEI4  
 UniRef90\_U4P6U4  
 UniRef90\_UPI0003F4ACF5  
 UniRef90\_UPI0004782867  
 UniRef90\_B2JRW4  
 UniRef90\_UPI00046E829A  
 UniRef90\_A8ZX26  
 UniRef90\_UPI000429C03A  
 UniRef90\_E6SGB9  
 UniRef90\_Q83RF3  
 UniRef90\_C4ZIN2  
 UniRef90\_C7N5H8  
 UniRef90\_B7QY50  
 UniRef90\_UPI00047E7E95  
 UniRef90\_V5SAT8  
 UniRef90\_R1GFA5  
 UniRef90\_UPI000376FCB0  
 UniRef90\_UPI000464886C  
 UniRef90\_C5AIL8  
 UniRef90\_I0IEY1  
 UniRef90\_UPI00036FC64C  
 UniRef90\_UPI00047CBF00  
 UniRef90\_B9L6C0  
 UniRef90\_UPI0002557DBC  
 UniRef90\_W4MC12  
 UniRef90\_C6B711  
 UniRef90\_UPI0003B416BC  
 UniRef90\_UPI00036E16A  
 UniRef90\_A4WMJ9  
 UniRef90\_C7QAY3  
 UniRef90\_D4BTF3  
 UniRef90\_M5EIS8  
 UniRef90\_J0L3Z3  
 UniRef90\_W7SFH7  
 UniRef90\_UPI00034891BE  
 UniRef90\_W8HGG9  
 UniRef90\_V3TSE0  
 UniRef90\_I0KBW3  
 UniRef90\_B4SKD4  
 UniRef90\_W3RSJ6  
 UniRef90\_W6X065  
 UniRef90\_Q3AAD3  
 UniRef90\_Q5GZ28  
 UniRef90\_UPI00036D0224  
 UniRef90\_UPI000371817E  
 UniRef90\_D7AE91  
 UniRef90\_UPI000423D59D  
 UniRef90\_Q5Y816  
 UniRef90\_UPI0004742D98  
 UniRef90\_UPI0003C7E263  
 UniRef90\_A0A023V2Q6  
 UniRef90\_X2NFQ8  
 UniRef90\_J8W1X3  
 UniRef90\_Q1QFI6  
 UniRef90\_UPI0003B668ED  
 UniRef90\_M3E3X0  
 UniRef90\_D6KALO

E E I I R K T L N V L G I S Y K R L K E R G V L K I P I D  
 E H Y L N A C L Q G S G I T L E Q L K S H V V V G C E D Y N R K  
 V A A D W L G F E K N Y D L I R D H I S H V V V G C E D Y N R K  
 N V D W L S L V A D Y D R I R D L I E Q T I P G F D Q Y N Q R  
 E Q G W N A M L A P T G L T V A C L R A Q  
 K L N W R A L A G N Y D L I R D H I A V T Q P G F T D F N R R  
 K V D W L T L A G N Y N L I R D Q I A A I I P G F A N F N T R  
 H P V P W E A F N D D Y D L I R D A I A D V V P G C A D Y N T R  
 E R R S D I T F M R E L G R R L D P K W W P W K T N E E L F D F Q L E P Y K I T  
 D T P W E K W D E E E K I Y Q E G Y E R W A K D D D G K L K E L G L N P L P W Q  
 V F N W V A A A T R T K K D G S E L E N L V S I T Q E D L D T L G V K G M P Q D  
 E P A I I A G I A E A T L G N H P V E W S S L I A N Y D T I R E H I A A V V  
 E P A I V A G L A E T V F G R D P L I D W G G L A N D Y D A V R A L I A G V F P  
 N P V D W Q S M A D N Y D N I R D L I E Q I I P G F E Q F N Q R  
 V V P W A D Y I A D Y N L I R D R I A D V Y P D L F A G F N Q R I K A P G G F H  
 K V Q W Q D L V S N Y D A I R D L I E K T I P G F D D Y N K R I R I P G G F R  
 N V A W Q E L V T N Y D L I R D L I E K T L P G F E H Y  
 V E R P L S Q W L E R A V P P E L C E T L G I D S Y R E L K Q G P R K I V Q P D  
 E D I F N E F K E M T K I S K K R H L D M H N M  
 C L T E I E I V A R L A Q A T L P D A G I D W M W Y A E D Y A R I R D A I E K V  
 W L S A C L P V Q G P D L E A L R R R G W A V V P W P E V A W S E G F A H P D G  
 I L S E I E S V V P  
 K I D W L A Y K D D Y A K I R D A I E A T L D G F Y D Y N T R  
 R I P W E S Y I G D Y G L I R E K I A E I Y P A I Y A D F P E K I K N P K G F H  
 E V A T I A A R R A A K L A G C E P E R A V A A T T G R R G P L R L L D L R L R  
 D L A I T T A I T R A G A P K E L A D E L T G E S G P E R R L D L M L R L G P Y  
 V V D W D S M I A D Y S L I R D A I E K V V P N F N E R L Q Q P G G F R L P N G  
 Q H E W I K Y L H A K T K E R N P E M P D Y E E M K T I G I F K K K C  
 V V D W A A M E R D Y D V V R D H V I S R V V P G F A D Y N A  
 E P A I I A G L A R A A L P D S K T P W E W Y V E D Y D R I R D T M A D V L Y G  
 E P F I V A G I A K A T L G E R S S V D W D A W R D D Y S L V R G E I A T T Y P  
 A E V Y R E I Q Q A W N P K T G Y D I R G A T Y E R L R E T P V Q W P C A  
 H I P W E S Y I E D Y D L I R E K I A Q V Y P E I Y T D F P K K  
 N T H Q I R E D I A R T V P L Y D G I Q H L K K K G D Q F Q W G G P L L C  
 V V A W E Y L V E D Y D R I R N D I E A V L P E F A D Y N Q  
 E W V R L Q I D S G S P A L E G Y T V D D M I E A G V  
 A E L M D Q A M D A Q S P Y L I Q G G F R P Q D M P L D R A L E I T T A D G R E P V  
 K V D W E G L A G D Y D R I R D D I E A V P I L F A N Y N E R V R Q P G G F H  
 V V N W L A H D Y D G I R D L I A R T I P G F Q D Y N T R V R K P R G F R L Y N  
 Q W H D P E S A F E A W K R A G R P C D Y S G L S Y A K L R E V S G V Q W P C T  
 H P A P W A Q F E D D Y D A I R D S I S R V V P G F D D F N T R  
 D T V D W R G Y L N D Y A R V R D A I E A T L P G F E N Y N A R  
 G G V D W D G L V E D Y D R I R D L I E Q V F P E F E G Y N A K  
 T T P Y E E Y A E D Y D R I R D A M S R C L E G F E E F N R R V R Q P  
 V V D W D A L G D D N D K I R D M I A R V L P A F G D F  
 E P A I I G G I A R A T L G D R Y G I D W E G M D Y D H I R D K I E E V F P D F  
 H H V D W K A M A D D Y D V I R D H C S R V I P G T E N F N E R V R T K Y G F V  
 P W D A V D I A I R G T G V T L K E L R E R Q L V K L K A  
 H P V P W E E L G A D Y D R I R D R I E R V I P G F E D F N T R  
 K V E W D D F I G N Y D L I R D A M E A V L P G F D D Y N A R I K I P  
 G Y D W K T E E D A F M D G Y N K N A G G G E F T Y E R L K A M G N N G F Q E P  
 V W N D V R Q  
 H T V P W E T F E G D Y D V L R D H I S R V V P G F S D Y N A R  
 E P M I V A R L A A A T L R G R S K T D W M W L V A D Y D R I R D K I A A V F  
 S T A D W V G F T E N Y D T I R D S V A R V I P G F E E F N R K I R Q P G G F Y  
 K V D W A G C M H D Y A P I R E L I A A V Y P E I Y A G F N E R I Q Q P H G F H  
 E P R L I A E I A K A T L P A N R A L D W D A W V A D Y A R I R D A I E Q T Y P  
 K V N W L A F A D D Y S L I R D D I A K V F D D F A N Y N E R  
 P D K A A E K A I E L M L A T G G P T V A G I T L E Q L K K G P V R L K L G T P  
 V Q D E I S K M V P I Y K G T L P G T K S R Q W S P E G F K H A P C F Q I P T Q  
 I S G M A R A A L P A S P T P W E W Y I E D Y D R I R D T M S E V L E G F E D F  
 A F A D L A A A T P G Y A G L T L E G L G D A G A V R V N N  
 E T A I V A A L A M A T L P D G H S I D W Q A W S T D Y S R V R T A I G K V I P  
 Y L R N E F R D P E T G K H P E N G L E F N E I A T K M Y T Q P L W D W D E F L  
 W K T E E D A F N D G F R R A G M V A E V K I D S Y E R L R V M G N N G V Q L P  
 E V A I I S R L A R R T L E G G S I P W E A F E G N Y D L I R D R I A R V V P G  
 P I N W E A L I G D Y A L T R D A I A A V I P A F R D Y  
 Q T R Q L Y Q L N G D H A L A K E L R Q K G Y L E W G L L R E P E S V R Q F T A  
 E T A I V A G I A K A T L P A N P K V R W D E W T G D Y A K I R D C I E K T Y P  
 W K T E E D A F M D G Y H G H E K G G E F V T Y E R L R V M G N N G F Q E P  
 T T D W V A M T E N Y D V I R D H I S R V F E H F N E K L R R P G G F Y L P N

UniRef90\_R7XV69  
 UniRef90\_B5IF98  
 UniRef90\_U2M8B0  
 UniRef90\_F0M2V7  
 UniRef90\_G8WDL8  
 UniRef90\_W0HXP8  
 UniRef90\_W0HXS2  
 UniRef90\_D9WEZ7  
 UniRef90\_U3U9N9  
 UniRef90\_W9BH80  
 UniRef90\_I4A7L9  
 UniRef90\_Q24N20  
 UniRef90\_F5YSK5  
 UniRef90\_D0WIN8  
 UniRef90\_A0KWD4  
 UniRef90\_X7E7C5  
 UniRef90\_F6CU45  
 UniRef90\_B8H4C9  
 UniRef90\_F0LX46  
 UniRef90\_K5YPY8  
 UniRef90\_U5E3G6  
 UniRef90\_W0PIX0  
 UniRef90\_A4WBD6  
 UniRef90\_B8FTZ6  
 UniRef90\_D5V5N2  
 UniRef90\_UPI00037A5144  
 UniRef90\_UPI00046D6367  
 UniRef90\_I3IP17  
 UniRef90\_A0B0Y7  
 UniRef90\_F2JWR7  
 UniRef90\_A0A023D2N5  
 UniRef90\_M2W833  
 UniRef90\_W9BRN4  
 UniRef90\_G8RS35  
 UniRef90\_NOCKL4  
 UniRef90\_D4GEI4  
 UniRef90\_E4P6U4  
 UniRef90\_UPI0003F4ACF5  
 UniRef90\_UPI0004782867  
 UniRef90\_B2JRW4  
 UniRef90\_UPI00046E829A  
 UniRef90\_A8ZX26  
 UniRef90\_UPI000429C03A  
 UniRef90\_E6SGB9  
 UniRef90\_Q83RF3  
 UniRef90\_C4ZIN2  
 UniRef90\_C7N5H8  
 UniRef90\_B7QY50  
 UniRef90\_UPI00047E7E95  
 UniRef90\_V5SAT8  
 UniRef90\_R1GFA5  
 UniRef90\_UPI000376FCB0  
 UniRef90\_UPI000464886C  
 UniRef90\_C5AIL8  
 UniRef90\_I0IEY1  
 UniRef90\_UPI00036FC64C  
 UniRef90\_UPI00047CBF00  
 UniRef90\_B9L6C0  
 UniRef90\_UPI0002557DBC  
 UniRef90\_W4MC12  
 UniRef90\_C6B711  
 UniRef90\_UPI0003B416BC  
 UniRef90\_UPI00036EE16A  
 UniRef90\_A4WMJ9  
 UniRef90\_C7QAY3  
 UniRef90\_D4BTF3  
 UniRef90\_M5EIS8  
 UniRef90\_J0L3Z3  
 UniRef90\_W7SFH7  
 UniRef90\_UPI00034891BE  
 UniRef90\_W8HGG9  
 UniRef90\_V3TSE0  
 UniRef90\_I0KBW3  
 UniRef90\_B4SKD4  
 UniRef90\_W3RSJ6  
 UniRef90\_W6X065  
 UniRef90\_Q3AAD3  
 UniRef90\_Q5GZ28  
 UniRef90\_UPI00036D0224  
 UniRef90\_UPI000371817E  
 UniRef90\_D7AE91  
 UniRef90\_UPI000423D59D  
 UniRef90\_Q5Y816  
 UniRef90\_UPI0004742D98  
 UniRef90\_UPI0003C7E263  
 UniRef90\_A0A023V2Q6  
 UniRef90\_X2NFQ8  
 UniRef90\_J8W1X3  
 UniRef90\_Q1QFI6  
 UniRef90\_UPI0003B668ED  
 UniRef90\_M3E3X0  
 UniRef90\_D6KALO

S Y E P K T E S G K I E I S S S R A K N R G L N  
 K G P V L P V S G D W I P F E H G V F R T P T R K A H F F I E E W Q K K E F S  
 I R Q E G G F V L P N G P R D S R T F H T P T R G K A M L T V N E L E H V Q R P  
 I R H P G G F R M P L P P T E R I W P T P T G K A M F  
 P G G V T V P V A P R E R H Y R A I G F A T E T G K V E L Y S E R L L K H G Y P  
 C D A P G G F Y L G N A A A E L R F T T P T G K A Q F S A A A L  
 C N M S K G F Y L G N S A A K L N F K T Y S G R A E F S A T A L  
 V R Q P D G F Q L P H P P R D A R E F P T H T G K A N F S V Y P L E W V P V P  
 W A E L K E Q W P F I E K R Y E Q N G F P T P S Q K L E I Y S L I F K S T D S D  
 E F L K K P I V R V P I D E P F Y P P W G T P S G K I E F S S K Y L E T H  
 D G L D H V V L K A F R D D P E A N P I G T T S G K L E I Y C Q R V K A C G W S  
 P G F S G F N Q R I L Q D G G F Y R N W K T P A G K A I L H S H P L P D  
 S A F A D Y N D R V R V P G G F R L P W R T A S G K A N F  
 I A P G G F Y L G N S A R E L N W K T A S G K A Q L T N N A L  
 L N N P P R A R Q W K T D T G K A N F  
 M P L P P T E R K W P T E T G K A M F  
 N D R I R T P G G F R M P L P P T D R W P T P T G K A M F  
 M L S D S H Y P K Y R F S V P Q A M E W G C P  
 K G E T F I W G E K L F K D N K F L T Q N E K A N L H F V K N E N L S E K  
 Y P Q F K D F N A R V R P G G F H V W L T P S G R A E F  
 R F R F L E A V H D E P S G P L P F R F L T L I R P A A L H S Q M L P E E Q P R  
 I A R P G G F H L R V A S R D R E W L T P T G K A N F I A H A L  
 L D I P P R R R V W N T P T G K A N F  
 S G P Y G D R F G L D P D G P L T P R L P T P D G R I D L V P E M I  
 G A H P H G I D L G P L K P R V P E I L R T R S G R I E L L P A P I A A L G E S  
 A S E R V W H T S S G K A Q F L V M E G I N E D  
 P E E H Y V A F R A F R V D P Q A N P L K T P S G K I E I Y S E R L A K I A D T  
 R V R A P G G F V L P H A P R D E R R F P T A T G K A N L T V N G L E  
 F E D F N R R V R L P M G F R K Q P F L T P S G R A E F S H A P L P D  
 D I F H D F N E R M W Q P G G F H R P L P T K S G K A E F L T P H S L G  
 P D S T S D R N P I R Y L H N E A G V F P T A S G K A V F W A R P Y L P P A E M  
 I K N P K G F H L D I P P R R R V W K T S T G K A N F  
 A G N R F N T P D G K A H F V V A P L P E Q  
 R I R H P G G F H L I N A A A E R R W M T P S G K A N F  
 V A R K D G V F G K A T Y P L G D K V F A T P T G R L E F F Y T E V L V P Y G  
 M C D S V L P A T P S G R I E L F S D R Y E A E G G F  
 L E N A A A L R R W N T P D G K A R F  
 A V D H R V W N T P T E R A N F S S D R L  
 P D S P H G T E R L Y A D G K F F P V E P T P D G K A M L K G A E Y L P P H E T  
 V R Q P D G F V L P N P P R D A R E F H T H T G K A N F T T S P M  
 I A Q P G G F H L R V A S R E R E W L T P N G K A N F I A H A L  
 I R Q P G G F H L W N S A S N R V W K T G S G K A N F F V E G V E E D P T S  
 L G F R L R Q A A R E R V F A T P S G G A E F  
 N K A V R Q H R G F W L R N P A S E R W N T P S G L A S F G E E  
 Y E F N T R V R K P G G F R L D F R R W N T P E R K A K F L P S P  
 L P N P P R D R R E F A T P Q G K A Q F T V R E L E Y L A P P  
 P D Y Y K F P T A T G K V E F F Y S A T A E R R G L P  
 V R R G S G F A L P H A P R D S R T F P T A T G K A N F T A N E F E A P  
 G G F H L T N A A S E R R W L T Q S G K A N F V P T E  
 A T A F E G K I V G T K R L Y T D G K F G T K D G K A T F M E A Q W R G L  
 V R E P D G F V L P H P P R D S R S F P T T T G K A N F  
 V D F A G F N E R V K T P G G F H L R W A T D T G K A N F F A  
 L P N G P R E R K F T T E T G K A N F S V T Q L E P H R L E  
 L D I P P R R R V W P T P N G K A N I  
 D Q F K D F N K R L F Q P G G F P R P W K T P T G K A N F  
 I K H P G G F H L R V A S R E L E W E T S T G K A N F V V H A V Q E  
 G N R Q I M F Y E Q I V E K K P F P P E S L P S G R I E F F Y K D E D I F L K  
 R K K D F P F Q L V S N N H M F H I G S Y T Q Y A K A E L H P E D A E A L G V N  
 N R R V R L P L G F R I K Q P A R E I F L T E S G K A E F S H A P L T D V V P A  
 C T A S F V P V A T S T V T T E A G K F A L L T G S A L N H S G T L S L Y G E G  
 E I F H D M E T R M K E P G G F H R P W L T E S G K A Q F I T P A T I L L E D  
 R I G T W N S I P Y R F R Q K W N G N W G T E T G D F E F Y S E T L K K A  
 A K A Y E G G K L T G T E M L Y S D G F D T P D G R A Q F K S A P W P G L P  
 F E D F N A R V G E P G G F R L P N P F P T P S G K A V F T C N E L  
 N A R I A E P G G F R M D T P A S R R W R T P N G K A N F  
 R Y P G A I A T D S D N T Y G E Q L R F K S P S G K I E L Y S A T L E E I  
 E Q F H D F A N R R V F T P G G F H R G W K T E S G R A Q F V P T A M R S I G F E  
 A T A F R D G K I V G T K R L F A G K F N S K D G K A T F M E T Q W R G L  
 G P R E R K F T T K T G K A N F T A T S L T K H T L E

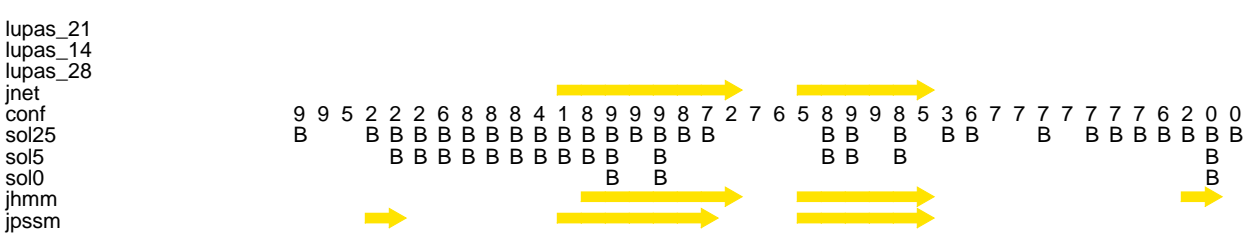
UniRef90\_R7XV69  
 UniRef90\_B5IF98 A F P T Y  
 UniRef90\_U2M8B0 P V V T Y  
 UniRef90\_F0M2V7 P  
 UniRef90\_G8WDL8  
 UniRef90\_W0HXP8 P L P T F  
 UniRef90\_W0HXS2  
 UniRef90\_D9WEZ7  
 UniRef90\_U3U9N9  
 UniRef90\_W9BH80 P  
 UniRef90\_I4A7L9 P L P D Y E E P A  
 UniRef90\_Q24N20  
 UniRef90\_F5YSK5  
 UniRef90\_D0WIN8 E L P P L P K Y M P  
 UniRef90\_A0KWD4  
 UniRef90\_X7E7C5  
 UniRef90\_F6CU45  
 UniRef90\_B8H4C9  
 UniRef90\_F0LX46  
 UniRef90\_K5YPY8  
 UniRef90\_U5E3G6  
 UniRef90\_W0PIX0  
 UniRef90\_A4WBD6  
 UniRef90\_B8FTZ6  
 UniRef90\_D5V5N2 T S K E F P F  
 UniRef90\_UPI00037A5144  
 UniRef90\_UPI00046D6367 P L E  
 UniRef90\_I3IP17  
 UniRef90\_A0B0Y7  
 UniRef90\_F2JWR7  
 UniRef90\_A0A023D2N5  
 UniRef90\_M2W833  
 UniRef90\_W9BRN4  
 UniRef90\_G8RS35  
 UniRef90\_NOCKL4 P A P  
 UniRef90\_D4GEI4 P  
 UniRef90\_E4P6U4 P L P A Y T P  
 UniRef90\_UPI0003F4ACF5  
 UniRef90\_UPI0004782867  
 UniRef90\_B2JRW4 E D P D M P E K V P E A  
 UniRef90\_UPI00046E829A P D N E Y P F  
 UniRef90\_A8ZX26  
 UniRef90\_UPI000429C03A D V P E  
 UniRef90\_E6SGB9  
 UniRef90\_Q83RF3  
 UniRef90\_C4ZIN2  
 UniRef90\_C7N5H8  
 UniRef90\_B7QY50 G V P R Y  
 UniRef90\_UPI00047E7E95  
 UniRef90\_V5SAT8  
 UniRef90\_R1GFA5 P D E D H P F F L  
 UniRef90\_UPI000376FCB0  
 UniRef90\_UPI000464886C  
 UniRef90\_C5AIL8  
 UniRef90\_I0IEY1  
 UniRef90\_UPI00036FC64C G D P  
 UniRef90\_UPI00047CBF00  
 UniRef90\_B9L6C0  
 UniRef90\_UPI0002557DBC D L R D L T E W Q Q  
 UniRef90\_W4MC12  
 UniRef90\_C6B711  
 UniRef90\_UPI0003B416BC E  
 UniRef90\_UPI00036EE16A P L P Q Y A P P R  
 UniRef90\_A4WMJ9  
 UniRef90\_C7QAY3  
 UniRef90\_D4BTF3  
 UniRef90\_M5EIS8  
 UniRef90\_J0L3Z3  
 UniRef90\_W7SFH7  
 UniRef90\_UPI00034891BE  
 UniRef90\_W8HGG9  
 UniRef90\_V3TSE0  
 UniRef90\_I0KBW3 P  
 UniRef90\_B4SKD4  
 UniRef90\_W3RSJ6  
 UniRef90\_W6X065  
 UniRef90\_Q3AAD3 L G E Q L P V Y K P P  
 UniRef90\_Q5GZ28  
 UniRef90\_UPI00036D0224 D  
 UniRef90\_UPI000371817E P  
 UniRef90\_D7AE91 P M L V C P E Y L E  
 UniRef90\_UPI000423D59D D D V T P P E P A  
 UniRef90\_Q5Y816  
 UniRef90\_UPI0004742D98  
 UniRef90\_UPI0003C7E263  
 UniRef90\_A0A023V2Q6  
 UniRef90\_X2NFK8 L P G Y  
 UniRef90\_J8W1X3 D A P G  
 UniRef90\_Q1QFI6  
 UniRef90\_UPI0003B668ED P  
 UniRef90\_M3E3X0  
 UniRef90\_D6KALO



```

UniRef90_K4LQP5           1          10          20          30          40
UniRef90_N6WY17         G F M C N S C A W S A F E F C E N G A K A V L W E L T T D R C T P E F W D R
UniRef90_G9XIC4
UniRef90_Q1NL67           C S L E F W V K N G K V H K I Y G N P H V P F N D G I V C
UniRef90_W1G7X3
UniRef90_I5C3T6         N G F D C P G C A W S F L A E Y C E N G K A V A E E A T L K R A D P E F F K K
UniRef90_UPI000382E9F3  D G Y A C V S C A W H P F E F C E S G A K A T A W E A D F F E R Y T V T E L E
UniRef90_D7AF63           S V C P F C A T G C I E Y H S R N G R V E R V T S D D S T Y N S G N L C
UniRef90_E8UZU4         S H G V D C M S C A W K F F E F C E N G A K A V A W E T D S R K C G R
UniRef90_Q13IS9         D G F M C V S C S W H T F E F C E S G A K A T A W D L T S R R V N P E F F Q Q
UniRef90_UPI000348AACD
UniRef90_W9DHX6         D G F D C P G C A W K H A E F C E N G A K A V A E E A T K R S V T P E F F A A
UniRef90_S3BEZ8
UniRef90_UPI0002486EFD  G F D C P G C A W N I V E F C E N G A K A V A E E P D F W A K Y T V E E L R
UniRef90_D6TQN5         S V C N N C S V G C A R V D V R V D R V T R L M S R N N D A I D D G W L C
UniRef90_B3Q9C0         G F M C V S C S W H T F E F C E N G A K A T L W E P E F F A E H S V T E L R
UniRef90_W1WHV9
UniRef90_UPI00037D82E6  G F D C P S C A W G I A E Y C E N G A R A V A E E A T A K K L T
UniRef90_M0C2D6         C E A G C G L L T Y I D K E G D I R K I E G N P E H P G S R G R N C
UniRef90_UPI00046438BF
UniRef90_Q9UWR0         C P Y C G A G C R A Y V K K E L I I E Y V T D I N V P N D R G K L C
UniRef90_B3V5K6         C E S A C G M L Y V D K E S E I V A K F E G N P H H P G S R G R T C
UniRef90_UPI000367FD34  D G F D C P S C A W R I A E Y C E S G A K A V A E E V M N K H T A S A D L L Q
UniRef90_UPI0002DDECD4
UniRef90_W0DFN1         V V K G E D G K L I L L L P A K D S P I N R G R G G
UniRef90_UPI000372F4C2  A W R I L T Q G T C D G C A L G T K G I R D W T M P E V H L C
UniRef90_UPI00047CB491
UniRef90_F0JH75         K I V T A C T M D C G D A C L V D T E R R T V R G N P K H P F T K G F C C
UniRef90_A9I3G6         H G V N C T G C S W K I Y V K G G I V T W E T Q Q T D Y P R T C S R G A
UniRef90_A3XP95         D G F D C P S C A W S P V A E Y C E N G A K A L A D E A T T A K A D K N L
UniRef90_E5AK88         M Y N I V K Q N G Q D V H I K P D H E C E V N S G L G S
UniRef90_I9CRR7         D G Y Q C N S C A W V P F E F C E N G V K A V A W E P D F F A K H T V I E L L
UniRef90_UPI0002375430
UniRef90_UPI00037B1A15  H G V N C T G C S W K V F V K N G I T G A D M P E F E P R G C P R G A
UniRef90_UPI00037974F2  M Y N M V K Q D G R D V H I K P D P N C V V N S G R G G
UniRef90_UPI0003B57240  G V M C M S C A W A F E F C E N G A K A T L W E L T K D D G H T V S Q L R
UniRef90_A3PGW9         G H M C T S C A W N L F E F C E N G A K A T V W D P D F F A A H S V S E L R
UniRef90_F8ENI0         E G F D C P S C A W S T I A E Y C E N G K A V A E E A T T K R L L
UniRef90_S4WA78         C E S A C G L L Y V D K E S G N V R K F E G N P Y H P A S R G R L C
UniRef90_A0A038GXH4     I V P D R Q C V V N S G L S S
UniRef90_H1YH42         G F D C S S C A W S P I A E Y C E N G K A L A E E A T T K K L T
UniRef90_UPI000382316D  D G F M C V S C S W H A F E F C E N G A K A T I W E Q T K R D F F S R H R V S
UniRef90_A5A3H7         I V P D K E C V V N G G L S S
UniRef90_UPI00047BFEBB  D G F D C P S C A W S P V A E Y C E N G A K A L G D E A T R E Q I G A G F
UniRef90_G9ZWF7         G F M C V S C A W H V F E F C E N G A K A T A W R G F F E E H T V S E L E S
UniRef90_UPI00030F6C13  A W R I L S Q G V C D G C A L G V S G L Y D Q T L T G P H V C
UniRef90_UPI00037F5495  S V C T F C S H C Q I D I N T H G N E I Y R I T S D D A G T T N N G N L C
UniRef90_D6E957
UniRef90_UPI00037F56E7  D Q S V C N L C G A C G I S V R K I N G R L V K I E G L D D Y P I N N G G A C
UniRef90_I4C8J6         C G N C P A G C V K V F L K N G E I V D I F G D E E H P V N K G S F C
UniRef90_S6C5K7         I V P D K G C S V N S G L S S
UniRef90_S6B382         T I T D K D G R R I M V V P D K T C S V N R G R G G
UniRef90_UPI00037F5495  C E S A C G L L A Y V D K D D S I R K K V E G N P A H P G S R G R N C
UniRef90_A8FIA3
UniRef90_A0A055KX94
UniRef90_B4U7B7         H G C Y L N A Y V K N G I T R L E P T R W E P R C C N K G L
UniRef90_UPI0003A98D8C  G V M C V S C A W H P F E F C E N G A K A T R C T P D F F T D H T V T L L R
UniRef90_B8G319         K D G R Q V V I V P A M N S P I N Q G R G G
UniRef90_A9YVN7         I V P D K E C V V N S G L S S

```

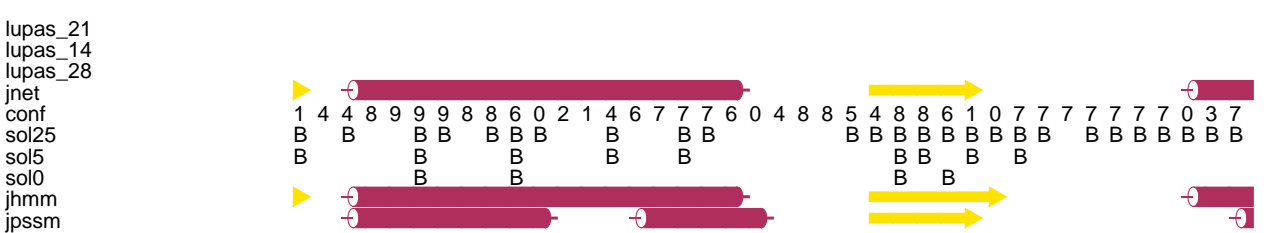




UniRef90\_K4LQP5  
UniRef90\_N6WY17  
UniRef90\_G9XIC4  
UniRef90\_Q1NL67  
UniRef90\_W1G7X3  
UniRef90\_I5C3T6  
UniRef90\_UPI000382E9F3  
UniRef90\_D7AF63  
UniRef90\_E8UZU4  
UniRef90\_Q13IS9  
UniRef90\_UPI000348AACD  
UniRef90\_W9DHX6  
UniRef90\_S3BEZ8  
UniRef90\_UPI0002486EFD  
UniRef90\_D6TQN5  
UniRef90\_B3Q9C0  
UniRef90\_W1WHV9  
UniRef90\_UPI00037D82E6  
UniRef90\_M0C2D6  
UniRef90\_UPI00046438BF  
UniRef90\_Q9UWR0  
UniRef90\_B3V5K6  
UniRef90\_UPI000367FD34  
UniRef90\_UPI0002DDECD4  
UniRef90\_W0DFN1  
UniRef90\_UPI000372F4C2  
UniRef90\_UPI00047CB491  
UniRef90\_F0JH75  
UniRef90\_A9I3G6  
UniRef90\_A3XP95  
UniRef90\_E5AK88  
UniRef90\_I9CRR7  
UniRef90\_UPI0002375430  
UniRef90\_UPI00037B1A15  
UniRef90\_UPI00037974F2  
UniRef90\_UPI0003B57240  
UniRef90\_A3PGW9  
UniRef90\_F8ENI0  
UniRef90\_S4WA78  
UniRef90\_A0A038GXH4  
UniRef90\_H1YH42  
UniRef90\_UPI000382316D  
UniRef90\_A5A3H7  
UniRef90\_UPI00047BFEBB  
UniRef90\_G9ZWF7  
UniRef90\_UPI00030F6C13  
UniRef90\_UPI00037F5495  
UniRef90\_D6E957  
UniRef90\_UPI00037F56E7  
UniRef90\_I4C8J6  
UniRef90\_S6C5K7  
UniRef90\_S6B382  
UniRef90\_K6WW94  
UniRef90\_A8FIA3  
UniRef90\_A0A055KX94  
UniRef90\_B4U7B7  
UniRef90\_UPI0003A98D8C  
UniRef90\_B8G319  
UniRef90\_A9YVN7

90 100 110 120

VGWADAFNDIATELNAL E PESA VFYSSG HAGLEAS  
VSWEEAIDLIGKKLYAIKQKYGAESIMDTGDVTDRDQYW  
IQWDEAFQLIADK LKSLPS PDRAIFYTSGRASNEAAF  
IGWDTAFAEI GARLRRA DRE QVVFYSSGRASLET SY  
ADWNTAMGTAATA LKQIVASH GA DAVAGFGS PRVTNEDNY  
ISWDESYQI IADELNAL ES PD EAVFYTSGRASNEAAF  
VTWEHAFAEI GRELRALIK PDEAVFYTSGRASLETAY  
SWDEALQLIADRIRAGGGGERGKAGFYLT SRGMPNENYY  
VSWDDANRIIADEF AAMAS PDEAVFYTSGRTSNEAAF  
ISWDDAIA MIADE LKSLID PDEAVFYTS GKATNEPAY  
ASWPE TIA YVAQR LQE IAS KH GAQA IGG IGS TRRTTNEETY  
CSWDEAFQA IGEHLRSLD PKS VIF YASGRASLET SY  
ITWEAAAFDK IGTENLR LGS PH EAVFYTSGRTSNEAAF  
VSWDDALEDI IASEMRETI IDGRENEIT YHVGRPGHE  
ISWKEAINEI IASFI RGYMKDD PNR LMF IAGGK VSNESAY  
IYWDQALDEI IAAKL RAS LKTGA KDRV VYHVGR PGNEG  
IAWEDAFRLI ADQLNALS PNEAVFYTSGRTSNEAAF  
VSWDEALDVI ATRI RATT PDR LSFY ITS RGT VNETYY  
VSWDEAI DL IAR VVKGVKDKWG PDS IAMK LHD HGN SGAGF  
ISWDDALEI IAA TRL RDT PA DR LGAY L TS RGT P NENYF  
TDWDTALGLT IAD R L D A A R R V  
ATWDEVNELVA AANVYTIKRYGP DRV VGF S P I P A M S M  
ISWQGA YDLI AQHLKELNA PDEAIF YTSGRSSNEAAF  
TSWEDALDLVA RVTAAVVKDQGE DGLFVSVVDF HGGSGAGGY  
VSWGHAIEELIARELRAVEDR KKGTVFYSSGR L S N E G S Y  
TDWDNAIALYAGLTKKIL DNDGP NGLFFD C F D HGGAGGGF  
VSWEDAMYLTS AQLIYTI RKYGP DRIAGFT P I P A M S M  
TSWDDALDLVA RVTAKV IEEQGEDGLFVSSAAD HGGAGGGY  
IAWDDAFAEIIGA TLRRELP REDVVFYASGHAGLEASY  
VTWEEAFREIIGGR LRG I D P KQTVFYTS GKASLETAF  
IEWDDVFGI IAKHLNQLQS PNEAIF YTSGRTSNEAAF  
VSWEAALDDIAGQI HNSLKA KR HNSV VYHVGR PGHEG  
TDWDHAMALYAGLKR TL D K D G P NGLVFS AF D HGGAGGGF  
ISWDEAFKKVQALNNLAS PNEAIF YTSGRTGNEASF  
VTWESA FREI IGAELNKL D P KSVIF YASGRASLET SY  
TPWDKALALYAGL LK KVL DNDGP EGLVFS C F D HGGAGGGF  
ISWQA AFDLI IASEL LK KLDN PDEAIF YTSGRSSNEAAF  
IPWSA AFQEIGA ALQGMK PDEAVFYASGRASNEASY  
LSWDEALDR I ARK I R S L D P KQLAFYLT SRG I T N E V I Y Y  
ASWDQA FDT I V S E V E A I R E A N G S Q T L A G L G S P R L S N E E N Y







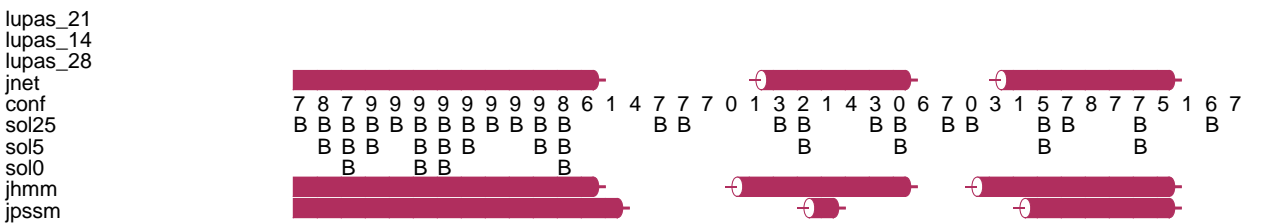


UniRef90\_K4LQP5  
UniRef90\_N6WY17  
UniRef90\_G9XIC4  
UniRef90\_Q1NL67  
UniRef90\_W1G7X3  
UniRef90\_I5C3T6  
UniRef90\_UPI000382E9F3  
UniRef90\_D7AF63  
UniRef90\_E8UZU4  
UniRef90\_Q13IS9  
UniRef90\_UPI000348AACD  
UniRef90\_W9DHX6  
UniRef90\_S3BEZ8  
UniRef90\_UPI0002486EFD  
UniRef90\_D6TQN5  
UniRef90\_B3QC0  
UniRef90\_W1WHV9  
UniRef90\_UPI00037D82E6  
UniRef90\_MOC2D6  
UniRef90\_UPI00046438BF  
UniRef90\_Q9UWR0  
UniRef90\_B3V5K6  
UniRef90\_UPI000367FD34  
UniRef90\_UPI0002DDECD4  
UniRef90\_W0DFN1  
UniRef90\_UPI000372F4C2  
UniRef90\_UPI00047CB491  
UniRef90\_F0JH75  
UniRef90\_A9I3G6  
UniRef90\_A3XP95  
UniRef90\_E5AK88  
UniRef90\_I9CRR7  
UniRef90\_UPI0002375430  
UniRef90\_UPI00037B1A15  
UniRef90\_UPI00037974F2  
UniRef90\_UPI0003B57240  
UniRef90\_A3PGW9  
UniRef90\_F8ENI0  
UniRef90\_S4WA78  
UniRef90\_A0A038GXH4  
UniRef90\_H1YH42  
UniRef90\_UPI000382316D  
UniRef90\_A5A3H7  
UniRef90\_UPI00047BFEBB  
UniRef90\_G9ZWF7  
UniRef90\_UPI00030F6C13  
UniRef90\_UPI00037F5495  
UniRef90\_D6E957  
UniRef90\_UPI00037F56E7  
UniRef90\_I4C8J6  
UniRef90\_S6C5K7  
UniRef90\_S6B382  
UniRef90\_K6WW94  
UniRef90\_A8FIA3  
UniRef90\_A0A055KX94  
UniRef90\_B4U7B7  
UniRef90\_UPI0003A98D8C  
UniRef90\_B8G319  
UniRef90\_A9YVN7

250 260 270 280

G A L A L A L L Y A V I K T D K Y D K Q F V E K W C Y G F D K L A E R V A Q Y P  
H Q L I M G I C K H V I E A D Q I D V A F I E K H T Q G F D R F L A S V E A A A  
N D I F A A M L R Y L E N D N Q N K K Y I D W N F K K Y S L G W D D F E K S F  
A A L V A G L A W V M L N E N L V D Q A F L D T Y C I G Y H Y K A Y I L G N G D  
V S L F K A L L K L M W D R E Q E Q P G S V F D H D F I Q E K T E G F E A L N A  
H E T P I S T Q Y H Q L R P G G L D V G F I R E H T H G F E A F R R T L R A A D  
T L L I N A L T K A V L E E G L E N K E F C S A N I S N L S D L T A A L A G V S  
I P L F K G I L K E M L A L J E D A N P G K A F D W T F I R E K T S G I E E L I A  
S A A I V G I C K A V I E A D D V D A G F I A E H T S G F D D F A R Y V R N A  
I A F L N G T L K H M I A N G W Q D K S F L Q N Y T T G F P E L Q A S L D S Q S  
M A L F R G V A R L L R D A E Q A N P G T V F D H E F L T G S C A G T E D Y L A  
R A L F L A I N K E L V K R D A I D H W F L E T Y T T G F E D L K K H L L S L D  
Q N G A G K A A K L L N Y V L E A G E V Q T S G Y E D I K S K V I G R E K G V  
V A V L I G L C K H V F A R D D L D V D F I E A H T H G L D E F E A K V R A I S  
L A L G M L H I H R D G L A D I D F I K K H V Q G Y D E L V N D V L L D  
K P A L T D I F L P V K I N G D F D Q K F I A G N T Q G Y T D F I Q D L R P Y D  
A A V L L A M A N V I L Q E G L Y D E E F L S H W V N W Q Q F L D E E Y P G Y D  
I P F M Y G M L H I F K H G W Q D E S F L K D R V F G M E H V I E E A K K W T  
I V L T N A L I N L L K R R N I K S A W V L T R T A N W P A L R G  
T A L F L A W A K M I L E R G M Y D R D F L E N W V N W D D W L E A D H P E E P  
M A L L K A M C K L L E E E K L D H S F I Q Q Y T A G Y D D F V K S L D Q F E  
I A F L N G V I K H M I A N G W V D E S F I N R Y T T G F A E L K A T I A N Q S  
Y V L A N A I A R A V W E K G W W D K E F V E K R T D T F E D Y K K S L M L D  
I G F L N G T L K H V L E N D W D R D F V E Q H T T G Y A D L V E S L S T Q S  
V A F L Y G M I R L I K E N K W Y D E K Y L S D R V Y G V E E I F K E C E E Y T  
R F L A A A V L K L F L E A G D L N P W V L T R T A N W P A L R G  
A A L A L A M G H V I L K E F H L E G K S E Y F R E Y C R Q Y S D M P F L V R L  
I P L M K L I L K K L I D H Q V F D H A F I E K Y T S G Y Q S F M N D L A Q Y D  
M V L F N A W L T E I A D K G W V D K A F I D A S T T D F D K A V A A N K T T  
K E T R I S S Q Y H Q V K A G G L D E A F I Q E H T H G F D T F L A W L I G T Q E  
T A L F N T L F S Y V V D Q S W H D K D F L A K H T K G F E D A V K T N R M S L  
A A L A Q A M T H V I L D E F Y Q Q R Q E P M F M N Y A K Q Y T D M P F M L L L  
L V L L N A L F T H V A D Q G W V D Q A F I D A H T K G R P A H L A D F R T A L  
V A A I L G L C K V V V E T D D I D H A F I K Q H T T G F E D F I A C C R D A  
I A A L A G I C K H L F A L J E D Q R G S V I D R A F V A E H T S D F E A F E A R  
V P L F K A F L K L M Y Q A G V F D W P F I E E Q T T G I Q E L L A D L E R Y T  
A A V L L S M A K I I L D E G R Y D R Q F M E T W V N W H D Y L Q E V H P G D E  
V A L F D G L F T Y V V D Q G W I D R D F I S Q H T N G F E E A V K T N R M S L  
T Q Q V A D L Y L Q V K I N G D L D H T F I K E K T T G Y D A L R A H L L K Y S  
E Y F Q L R C G G D I A A M T G I A K A V L A L D D A A K A S G A P R V L D V E  
I A L F N G L F T Y V V D Q G W I D K P F L K D H T S G F D E A V K T N R M S L  
I P L V K L I L K L V A L Q Q S K D V F D H A F I E K Y T D G Y N A L I N D  
I A L L T G L C K S L I E W D V L D W A F I Q G H T H G F D D F A K A M R G H E  
I A F M N G V M K H W F E M E A I D R E F V D A H A N G F E Q L K A H V I S Q D  
L E L A N G I S R L L Y E R N L L D T P Y L N Q C L A N P E E L K V H L E A I N  
Y N F N G V T C R T A Y D I L L V A

7 8 7 9 9 9 9 9 9 9 8 6 1 4 7 7 7 0 1 3 2 1 4 3 0 6 7 0 3 1 5 7 8 7 7 5 1 6 7  
B  
B  
B  
B B



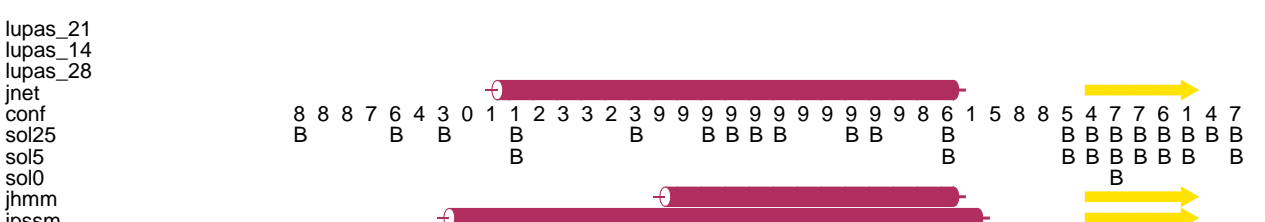
UniRef90\_K4LQP5  
UniRef90\_N6WY17  
UniRef90\_G9XC4  
UniRef90\_Q1NL67  
UniRef90\_W1G7X3  
UniRef90\_I5C3T6  
UniRef90\_UPI000382E9F3  
UniRef90\_D7AF63  
UniRef90\_E8UZU4  
UniRef90\_Q13IS9  
UniRef90\_UPI000348AACD  
UniRef90\_W9DHX6  
UniRef90\_S3BEZ8  
UniRef90\_UPI0002486EFD  
UniRef90\_D6TQN5  
UniRef90\_B3QC0  
UniRef90\_W1WHV9  
UniRef90\_UPI00037D82E6  
UniRef90\_MOC2D6  
UniRef90\_UPI00046438BF  
UniRef90\_Q9UWR0  
UniRef90\_B3V5K6  
UniRef90\_UPI000367FD34  
UniRef90\_UPI0002DDECD4  
UniRef90\_W0DFN1  
UniRef90\_UPI000372F4C2  
UniRef90\_UPI00047CB491  
UniRef90\_F0JH75  
UniRef90\_A9I3G6  
UniRef90\_A3XP95  
UniRef90\_E5AK88  
UniRef90\_I9CRR7  
UniRef90\_UPI0002375430  
UniRef90\_UPI00037B1A15  
UniRef90\_UPI00037974F2  
UniRef90\_UPI0003B57240  
UniRef90\_A3PGW9  
UniRef90\_F8ENI0  
UniRef90\_S4WA78  
UniRef90\_A0A038GXH4  
UniRef90\_H1YH42  
UniRef90\_UPI000382316D  
UniRef90\_A5A3H7  
UniRef90\_UPI00047BFEBB  
UniRef90\_G9ZWF7  
UniRef90\_UPI00030F6C13  
UniRef90\_UPI00037F5495  
UniRef90\_D6E957  
UniRef90\_UPI00037F56E7  
UniRef90\_I4C8J6  
UniRef90\_S6C5K7  
UniRef90\_S6B382  
UniRef90\_K6WW94  
UniRef90\_A8FIA3  
UniRef90\_A0A055KX94  
UniRef90\_B4U7B7  
UniRef90\_UPI0003A98D8C  
UniRef90\_B8G319  
UniRef90\_A9YVN7

290 300 310 320

```

P WE D E A G S G L T R V A L K E A A D T Y P A E D I Y A A A E C L V Q K P S S A C T G V A
V E K A A E I T G I P A D K I V E A A R M Y M A A E R V I G V Y G M G
D G I A K T P Q W A S H V T G I P A D R I I K L A R E I G T K P A A L I W G M Q S
D I A S Y D A E A L A A D S G V P F H L V Q E T A E L L C S K K N I C W A M G
W D H I E R E S G L M R G A M E S V A D I Y C G A R A A M G V Y G M G
I A D A A A A T G V T E A D L R A A A R L V G G K K G V A V I F G A E L M R G G
D L R L A D F D V L V H Q S G V P R E K M R E V A E L L K S D R I T T A W C L G
R W D E L E R L C G L T R A A L T A A A D E Y M R A K A V I H Y G M G
W E D L E R G S G T N R E E M L A F A Q M V G E A K N A V F V W S M G
L L D D V D I D E V A I T G L R A Q I V D L A D A V R T S Q R I V L C W A M G
P D Y V E K E T G V K A E D V I A A A R M F A D G P S A M M L P G Q S
I A E A E S A F G A E V V A Q L R Q L A Q E I V S A G S A A K G A V I L Y D E M
W D E I E H E S G L S R E A I E S A G D V I Y V K A E R V I G V Y G M G
F T P E K A S E L C G V S V E R M I E F A H A Y A K A K P I R L G S G
A G Q L A A Q A G V P Y A Q V I Q E V A R V L A G K T K I I A C W A M G
T Y A E F T P E Y A E A E S G V D A A T I E K V G R K I G S R F A S H I W R S A
P E R T A D V T G V D V D T L I Q I T R A Y T T S K P G T L I W A M G
I I S K N T P E Y A E R I T G V P V R D I E E I A R E I G A R R G I L W G S G
R T F E R F I E L L L E E Y D E Y T P E F A A A E C R I P V E Q V I E A G E A V
L S D L A A Q C G L T I S Q I Q E A V D L F K Y T R K L I I C W A M G
W E E L E K L S G S T R E Q M Y A F A K M V G E A Q K A V F V W S M G
V P Y D E F M S R V E R L T G V K R A D I E K A A E W I A K P R T L I I Y E K G
W E E L E A L A G V D R G M R E A D I R E A K T A V L V W S M G
P E H V E Y I T G L P K E T L T I Q A A T L Y A S S K P G C L I W N Q G
I V D G L K F R D L C A A C D V P A E D A E M V Y E W Y A E R N T A T V Y G W G
V R Q G D H Y V P R E M L R A D F P D G L G Q S N N P A W K T V A C D D A S G
E E D L L E R C G V S E A S I N K A V A M L R K S K K I I V C W A M G
L E Q A A E I T G L T V D Q I R Q S A A W L A E P K E G K R R R A T M F A Y E K G
W D E L E R S Q L H R A D M E S T A K V Y S V S K A V I A V Y G M G
E D G S K A T G I S V D R L K Q A A D W A Y K P K A S G H R P R T F H P Y E K G
D P H E D S L K G G R F L R A S D L G N M S E H A D W K P V I T D Q T A G
E A T R T S P E E A E Q I T G V S A A D I R K A A E W I A K P R T M F C Y E K G
Q W P D I E K A S G L T E A A L R D A A Q V Y I D A E K V I G V Y G M G
I R D T S W E E I E R N S M L R R A D L E Q V A E I Y A R S E K V I G L Y G M G
L P Q L A E D C G L T A A Q I E E A A A L I I G S Q K I V A C W A M G
V I F D N F I K R I K E E Y A E F T P Q F A A Q E A G V I E A K I V E A A Q H V
E D T S K A T G V P V E K L Q T A A E W A Y K P K G S G Q P T R T M H A Y E K G
L N D L A V A A G V P A E Q I R E A A N M I K H K S K I I C W A M G
F I A E H G H G F E E F E A Y L R A A D W S E I E R C A R S N A V I A H Y G M G
D E C S K I T G V P V E D L K K A A E W S Y K P K K T G Q L P R T M H A Y E K G
L R N Y D S E E L L K Q T G V S E E R N E T V A L L A N K S K I I V C W A M G
W R D I E R H S G V S R A Q I E S I A D A Y R Q A S R V M G V Y G M G
W E L I E K S G L S R E R I G E F A K L L A A A K S G V F V W S M G
V D K V C A D T G V S R K L L E E T A D M L G A A K T V S I I F G A E
D I M D Y S P E A A S K I C D I P A D T I I E L A H M A V D G P C I H R L G W G
K N E Y T P D K V E A V I T G V K A A D L E A L A M E F I K A K A P V A V P G K G
L E T A A K D C W V D I K D L E R M A D T I G R A Y P I Q V I A G S W S R R Y
D E T A R I T G V S A D T L A K A A E W A Y K P K A S G Q M P R T M H A Y E K G
D D T S R L T G V P V E R L K Q A A E W A Y K P K A S G H R P R T M H A Y E K G
D Y A Q Y T F V A A Q E A Q V V E R I E E T A R L V A E C D S A H V W R S A
W E D L E A S S G L S K E R M K E F A I L L A N A N S G V F I W S M G
V A D Y A Q R C G V D E E L L R A A A R R I G T A A S V S V F E D L G

```

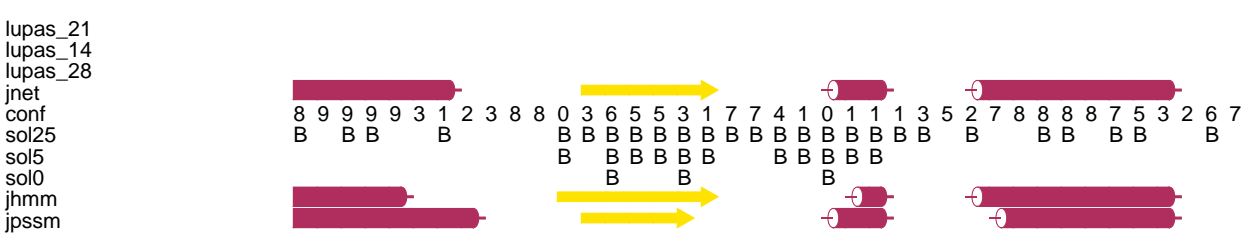








UniRef90\_K4LQP5 E A L E T G K P Y P I K F A F I Q S T N F L A S S I V V Q P K R W Y E A M R K L  
UniRef90\_N6WY17 V E M V E G L L J A G T V K A S I C L G G N L L R A V P D Q H R M E D T W T R Q N  
UniRef90\_G9XIC4 E T C E T G K P Y P I K F G F Y A G N N L M S C T S A E P K R W H D A V K T L D  
UniRef90\_Q1NL67  
UniRef90\_W1G7X3 V R G K D K L D V P I K F I W N Y A G N T I T N Q H S D I N K T H Q D D T K C E  
UniRef90\_I5C3T6 E A M Y A G E A D V F F G L G G N F L S A T P D T N Y T A K A L M N C D  
UniRef90\_UPI000382E9F3 V E A C E G I L J A G R V Q A F V A L G G N F V R A V P E T A L M E A A W R E L P  
UniRef90\_D7AF63 W Q L I E G I E Q G S V K A L Y L L G C D P V A S F P E G E R I R K A L E K L E  
UniRef90\_E8UZU4 V E S I K A M H A G K A K V F I G L C G N F L S A A P D T E Y T A E A M R N T R  
UniRef90\_Q13IS9 V D A C K G V I D G K V R A V F Q L G G N L V R S V P D R Y A I E P A W R K L R  
UniRef90\_UPI000348AACD P E M I D A A H E G Q L D V L F S V G G N F L E V M P D P D Y V E A A L R R V P  
UniRef90\_W9DHX6 N A M A A G K V R V F M G M G N F V S A T P D T E A T A D A L R R C A  
UniRef90\_S3BEZ8 N A L P E M V K A G R I K A F A G F G A N L L T W P D P A E Y Q E A V R N L D F  
UniRef90\_UPI0002486EFD Q A M R D G K V K F F L S L G G N L V R V A S D T S I L E Q G V S A N E  
UniRef90\_D6TQN5 M T Y N E M L T G S Q L K A L F V M G A N P L R H L N G A T L P Q S I E  
UniRef90\_B3QC0 V E A C H G L L J E G K V R A F I S L G G N F V R A L P E R D A M E G A W T R M Q  
UniRef90\_W1WHV9 G E M L T N P S G T A V H S L Y V F S S N P A I T A P D Q N V V R K G L M R D D  
UniRef90\_UPI00037D82E6 V E C I K A M H A G E A K V F F A M G G N F L S A T P D T R F T A E A L Q K C R  
UniRef90\_M0C2D6 L P Y F L K E G R G K L S V Y F T R V F N P V Y T Y P D G F S W I E D E D K V G  
UniRef90\_UPI00046438BF R F D T P K M M H T K G F T L A K W W Q G V L Q E E K I Y Q K T P I R A L W V Q  
UniRef90\_Q9UWR0 P K S I K E A Q K R N V S A F Y V M G A N I A L S F P E A E K A L R R A E  
UniRef90\_B3V5K6 L P H L V K D G R G A M D V F F T R V F N P V W T Y P D G F S W I G M L E D E E  
UniRef90\_UPI000367FD34 V K A V R A M H E G K A K V F F A L G G N F S L A V S D T N Y T A E A L K K C K  
UniRef90\_UPI0002DDECD4 P E M I D A A Y N S Q L D V L F S V G G N F L E V L P E P D Y V E D A L Q R V P  
UniRef90\_W0DFN1 Q A Y K K R V H E R T L A L T R Y L S E Q A K L A G E P S G S E E R A K R L I E  
UniRef90\_UPI000372F4C2 T E M L D A A H D G A L D I L T S S G G N F L E V L P D P A Y C H D A L A R I P  
UniRef90\_UPI00047CB491 R F K S K E L M E T Q I K A L V C I G N G I S T V T D V K R I K E A L D K L D  
UniRef90\_F0JH75 D P P V D F V W I D G H N V V N Q V P D G L A V A E A L A A P  
UniRef90\_A9I3G6  
UniRef90\_A3XP95 V E S I Q A M H E G K A K A F F C L G G N F L M A A S D T Q Y T A E A I E Q C E  
UniRef90\_E5AK88  
UniRef90\_I9CRR7 V E A C E A V L K D E V R A F F M L G G N F V R A L P D H G Q M E P A W R R I R  
UniRef90\_UPI0002375430 E Q H R R A L S R R A K I V N E A I A K A Q G A S T E Q L T D V I Y G A C K N K  
UniRef90\_UPI00037B1A15  
UniRef90\_UPI00037974F2 N A L E F K R V Y K E R T D K V K D A M N A V P Y G D R E A M V E A I M G A I  
UniRef90\_UPI0003B57240 V D A V I Q G L I E G K V R G F I S L G G N L V R A V P D Q K R M E D G W A E Q D  
UniRef90\_A3PGW9 A V A T E K L L D G T M K A F L S L G G N F A R A L P D Q G R T D A A W A G L D  
UniRef90\_F8ENI0 V E A I K A M H Q G K A T V F F A M G G N F L S A T P D T S Y T A K A L R N C R  
UniRef90\_S4WA78 H E L S F L L P H F E L D V Y F T R V F N P V W T Y P D G F S W I R D E S K I K  
UniRef90\_A0A038GXH4  
UniRef90\_H1YH42 V D S I K A M H Q G K L K V F V A M G G N F L S A T P D T T Y T A E A M R K L K  
UniRef90\_UPI000382316D V E A C E G I L L D G S V K A F I G L G G N F S R A V P E T E L I E K A W R K M R  
UniRef90\_A5A3H7  
UniRef90\_UPI00047BFEBB K A M Y E G N A K I F M C L G G N F L M A A S D T E Y T A K G I Q N C D  
UniRef90\_G9ZWF7 V E A A G K V I R G E V K A V F Q L G G N L V R S L P E H R L L E P A W R K L P  
UniRef90\_UPI00030F6C13 D I V G P D G H E R K T R L E Y T S G G N F L E T M P D P A F L K Q C L E A V E  
UniRef90\_UPI00037F5495 M G I L E G I E A G Q I K F L Y L A A T N P L T Y P N A N R W R K A L E K V D  
UniRef90\_D6E957 R T G K Y K G Q D Y P I K S L Y V Y S G N P V C N Q V N T N E Y L R D I V G N L  
UniRef90\_UPI00037F56E7 L V D K L E A D G G L S A L F I Y N A N P C Y A L N N P E K V K A M D K V G  
UniRef90\_I4C8J6 R G N P C A R L J A D G K K T K A A M S E I P L I V H L S S Y P N E T F H R A H F  
UniRef90\_S6C5K7  
UniRef90\_S6B382  
UniRef90\_K6WW94 L P H F L N E G R G R I E V Y F S R V F N P I W T Y P D G F T W M Q A L T D T Q  
UniRef90\_A8FIA3 T I G Q S F E H P Q K L K M L F T S G G N F L E T M P N P D A I E K A L S E L E  
UniRef90\_A0A055KX94 E E I L T E H P D R F R A M I V E R G N P A H S L J A D S A A C R A A F Q A L E  
UniRef90\_B4U7B7  
UniRef90\_UPI0003A98D8C V D A V K G M M A G K I K A T I S L G G N L V R A V P D Q K A M E S A W A E Q E  
UniRef90\_B8G319 F R K R I H E R T T K L T K A L G E S G E A A T I Q G R I D K A L Y S D P D A L  
UniRef90\_A9YVN7



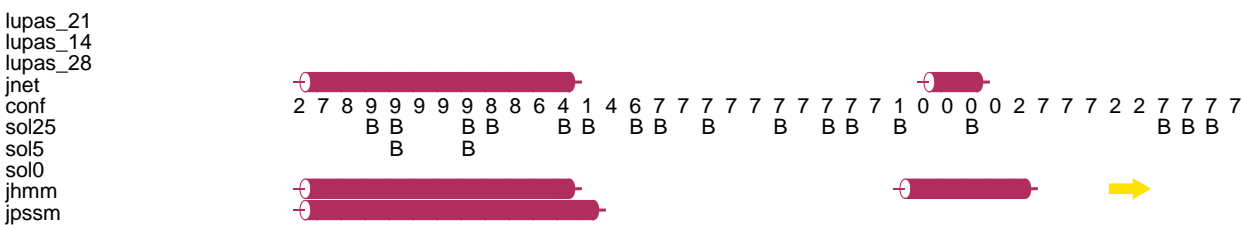




```

UniRef90_K4LQP5      P E S Y L T H           530              540              550              560
UniRef90_N6WY17     P K V K W D E W T A D Y S Q V R D L I E Q T Y P D D F R D F N Q R L F E P G G F
UniRef90_G9XIC4     Y H D F I D H L R L S R K L R F           E E A K K E V T I Q R D V K
UniRef90_Q1NL67
UniRef90_W1G7X3
UniRef90_I5C3T6     K V D W V K M V Q N D H I R D A I E A V I P G F D S Y N K R V R K P G G F Y L P
UniRef90_UPI000382E9F3 E A A I V A G L A K A T L E P S P R V D W D A W V A D Y G R I R D A I A A T W P
UniRef90_D7AF63     V L D E V A A L V P A Y A S V G R T G G
UniRef90_E8UZU4     S K V D W L S L L D N Y D L I R D L I G K V I P G C D G Y N E K V R K Q F G F Y
UniRef90_Q13IS9     S V D W D A W S N D Y A L V R D A L A E T Y P E I F H D F N A R M W T P G G F H
UniRef90_UPI000348AACD G T P A I R E E I A K T V S F Y E G I E N L K E A G D Q F Q Y G G A H L C A D W
UniRef90_W9DXH6     H P V P W Q E L K G N Y D A I R D R I E R V I P G F E D F           N I
UniRef90_S3BEZ8     P V K A C D S M L N D W G T S           Y A E R Q A M L P N V N V C E W F P A P
UniRef90_UPI0002486EFD L K S E V D I L C S I G R E T F           G D D Y W Q P M I D N Y D V L R D H I A N T I
UniRef90_D6TQN5     I F D E I A E
UniRef90_B3QC0      E L A I V A G I A K A T L P D N P K L K W D D W V G D Y G L V R D L I A E S Y P
UniRef90_W1WHV9     R E L I D Q I V S T S H R I S K D D Q N L I L Q G E P V E M T L P E N
UniRef90_UPI00037D82E6 Y W D R Y A A D Y D L I R S D I E R T I P G F A D Y E R V R Q P G G F Y L P N C
UniRef90_M0C2D6     D L S W
UniRef90_UPI00046438BF S F K W P E D A T R E I A R T I K T I G L T G W T P E R L K R           H Q Q N W H
UniRef90_Q9UWR0     I L R E I S T L V P Q Y A
UniRef90_B3V5K6     D D G T M G I R E H F M S P Y R E G E R I T V D E Y Y Q Y T F E R V P G L P M R
UniRef90_UPI000367FD34 P R A S V D S Q S R P Y I N W D S L V S N Y D L I R D L I E K V V P G F E Q Y N
UniRef90_UPI0002DDECD4 N T A A M R Q E I A Q V I P Q Y A G I Q H L I Q Q A G D Q F Q Y G G S H L C
UniRef90_W0DFN1     E A K Y C A G M D W K S A E E V F L D G A S E F P N N R V S E A D E A M L P A E
UniRef90_UPI000372F4C2 G T P E I R A E I A R A V P M Y D G I Q H L S A F G D S V Q Y G G P H L C A D W
UniRef90_UPI00047CB491 N F Q W P E D A T D E V A K A L K T I G M K G V T A Q R L K K Q Q E N W H
UniRef90_F0JH75     E T C L R E G L K A S A V S F D E L
UniRef90_A9I3G6
UniRef90_A3XP95
UniRef90_E5AK88
UniRef90_I9CRR7     P R V R W D A Y K Q D Y A E I R K E I G H T L P D S F W D Y E R R M W E P G G F
UniRef90_UPI0002375430 E D A F N D G F R R A G R P G V G P I D S Q G G D T G Y M A T Y A L L R K A G N
UniRef90_UPI00037B1A15
UniRef90_UPI00037974F2 Y A D Q F K G F D W Q T E E D V F M D G Y H Q H T Y D R L R E M G T N G F E P A
UniRef90_UPI0003B57240 E L A I V T G I A K A T L D P N P K M K W D E W T A D Y A L V R D L I E A T Y P
UniRef90_A3PGW9     E A A I V A G L A E A T L P A N P K L R W R N W V G D Y R H I R D L I E A C W P
UniRef90_F8ENI0
UniRef90_S4WA78
UniRef90_A0A038GXH4 L S W K M D P D E S L G I R D
UniRef90_H1YH42     E V A I V C R M A K A T L G S R S V I G W D K F A           A D Y D N I R A D I E K V I
UniRef90_UPI000382316D E P K I V A E L A K T T V P G R S T I P W D D W V A D Y S R V R D E I E R A Y P
UniRef90_A5A3H7
UniRef90_UPI00047BFEBB H P M K W K T L G E D Y D L I R T Q I D Q V           A K G F N K T K E R
UniRef90_G9ZWF7     P A I I A G I A K A T L P P N P K V D W D A W V G N Y E L V R Q A I A E T F P
UniRef90_UPI00030F6C13 E I A R A N P N Y D G I Q H L E K R G D V F Q W G G A W L C E G G I C P T P D G
UniRef90_UPI00037F5495
UniRef90_D6E957     Q Y M A           Q V I N T P A L E K L G I T W E N V K
UniRef90_UPI00037F56E7 W N A Y D A C L E E V T G D I W D
UniRef90_I4C8J6     Q V V S A K D L D P E I N P P G G I L W P C I D P S E L D F E D N R L I Q G N I
UniRef90_S6C5K7
UniRef90_S6B382
UniRef90_K6WVW94
UniRef90_A8FIA3
UniRef90_A0A055KX94 T A E D I R R E I A I A N R N Y D G I Q Y L R H K G D V F Q W G G A W L C
UniRef90_B4U7B7
UniRef90_UPI0003A98D8C P T L K W D E W T G D Y G L V R D L I E T T Y P D Q F E R Y N D R M F Q P G G F
UniRef90_B8G319     V W K T D E D V F L A G A Q E F K D N Q V S E E D E A T L E A E N Y K G V T Y A
UniRef90_A9YVN7

```





UniRef90\_K4LQP5 P L P Y Y I E P 610  
 UniRef90\_N6WY17 P G P G  
 UniRef90\_G9XIC4 P L P Y Y  
 UniRef90\_Q1NL67  
 UniRef90\_W1G7X3  
 UniRef90\_I5C3T6 D D  
 UniRef90\_UPI000382E9F3 D L S G  
 UniRef90\_D7AF63  
 UniRef90\_E8UZU4 P  
 UniRef90\_Q13IS9 D M P E  
 UniRef90\_UPI000348AACD  
 UniRef90\_W9DHX6 P G L P V Y V E P  
 UniRef90\_S3BEZ8  
 UniRef90\_UPI0002486EFD P  
 UniRef90\_D6TQN5 D A P G  
 UniRef90\_B3Q9C0 Y L P P Y P F W L  
 UniRef90\_W1WHV9  
 UniRef90\_UPI00037D82E6  
 UniRef90\_M0C2D6  
 UniRef90\_UPI00046438BF  
 UniRef90\_Q9UWR0 E  
 UniRef90\_B3V5K6 P  
 UniRef90\_UPI000367FD34 P L P A  
 UniRef90\_UPI0002DDECD4 P M K F Y P P  
 UniRef90\_W0DFN1 D  
 UniRef90\_UPI000372F4C2  
 UniRef90\_UPI00047CB491  
 UniRef90\_F0JH75  
 UniRef90\_A9I3G6  
 UniRef90\_A3XP95  
 UniRef90\_E5AK88  
 UniRef90\_I9CRR7  
 UniRef90\_UPI0002375430  
 UniRef90\_UPI00037B1A15  
 UniRef90\_UPI00037974F2 D K P G  
 UniRef90\_UPI0003B57240 P  
 UniRef90\_A3PGW9  
 UniRef90\_F8ENI0  
 UniRef90\_S4WA78  
 UniRef90\_A0A038GXH4 E L P V H  
 UniRef90\_H1YH42 T D P D I  
 UniRef90\_UPI000382316D  
 UniRef90\_A5A3H7  
 UniRef90\_UPI00047BFEBB D T P  
 UniRef90\_G9ZWF7  
 UniRef90\_UPI00030F6C13  
 UniRef90\_UPI00037F5495 E R E H L P R Y F N P  
 UniRef90\_D6E957  
 UniRef90\_UPI00037F56E7  
 UniRef90\_I4C8J6  
 UniRef90\_S6C5K7  
 UniRef90\_S6B382  
 UniRef90\_K6WW94  
 UniRef90\_A8FIA3  
 UniRef90\_A0A055KX94  
 UniRef90\_B4U7B7  
 UniRef90\_UPI0003A98D8C  
 UniRef90\_B8G319 A A K E Y P F W V  
 UniRef90\_A9YVN7

lupas\_21  
 lupas\_14  
 lupas\_28  
 jnet  
 conf 7 7 7 7 7 7 7 8 8 9  
 sol25 B B B  
 sol5  
 sol0  
 jhmm  
 jpssm