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Dear Partners,

Since the early days of the company, we have continually developed our portfolio, our team and our network with the objective of your complete satisfaction.

We understand your need for high quality products, for cost effective solutions and quick and efficient service. They are the focus of our work and guide us in the research for consistent, better performing and more convenient ambient temperature stable molecular biology reagents. Please feel free to contact our team of experts and we will be ready and eager to support your research. Thank you for trusting Solis BioDyne.

Sincerely, Kadri Artma, Managing Director

About Us

History

Solis BioDyne has been developing and producing life science reagents since 1995. The company is based in Tartu - Estonia, an international academic city with a growing biotechnology sector.

Production

Solis BioDyne manufactures top quality molecular biology reagents. Our product line includes DNA polymerases and mastermixes for PCR & qPCR, all stable at ambient temperature.

Quality Control

Each product batch goes through very strict QC based on our ISO 9001:2008 management system. This guarantees optimal and consistent performance of our reagents.





International Presence

Solis BioDyne currently has clients in 91 countries. We make our reagents accessible globally either by supplying them directly or in some areas by relying on local distributors who share our high standards in service and technical support. Please see the ordering section of this catalogue or contact us directly to find the most convenient way to order in your region.



Regular insulated packaging

Solis BioDyne packaging

Eco-friendly transportation

Shipment at ambient temperature is the most ecological and economical way to dispatch reagents. It is better for the planet and for the customer's budget.

Logistics

We are committed to shipping all packages within 3 working days after the order confirmation. Our Solis TAG Technology enables shipment at ambient temperature via express courier in compact packages. It eliminates the need for refrigeration and cumbersome insulation boxes. **Dye Based**

6 NEV

Stability TAG Technology

Polypeptide Stabilization Technology: Stability TAG

Stability TAG increases polypeptide shelf-life and its tolerance for temperature at a wider scale without compromising the properties of the polypeptide itself.

Thanks to Stability TAG, Solis BioDyne is offering Eco*-Friendly enzymes, mixes and other products with

· Convenient, fast and care-free reaction set-up at ambient temperature without ice-box needed

The best price-quality ratio on the market

· Reduced waste and environmental impact due to smaller package size and ice-free shipping

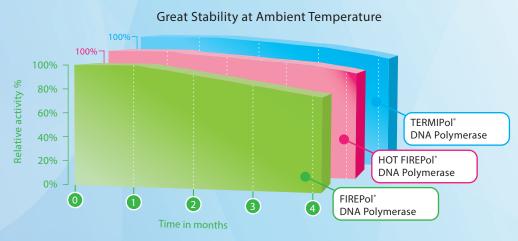
*Economically and ecologically friendly solution

I recently imported a number of reagents from Solis BioDyne, unfortunately due to a stubborn Pakistani customs officer our shipment got stuck at room temperature (+40 °C) in a customs store house. When we finally received the shipment after two months I was not very hopeful that the reagents would work, but to my utter amazement all of them performed excellently in PCR amplifications. I am really pleased with the results and the extremely cooperative Solis BioDyne customer support that we got throughout the ordeal.

Reagents

Prof. Dr. Raheel Qamar

Dean of Research, Innovation & Commercialization COMSATS Institute of Information Technology **ISLAMABAD, PAKISTAN**



Exceptional Stability at Ambient Temperature

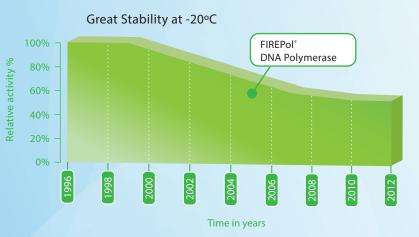
All enzymes produced at Solis BioDyne are exceptionally stable at ambient temperature due to specific genetic mutations Stability TAG Technology. When stored at ambient temperature for up to one month, the enzyme integrity is guaranteed with no degradation of activity.

Long Term Stability at -20°C

In addition to excellent stability at ambient temperature, enzymes produced at Solis BioDyne also exhibit extraordinarily long shelf life. Even after 16 years, our first batch of FIREPol[®] DNA Polymerase gives satisfactory results in PCR.

Repetitive Freeze and Thaw Cycles

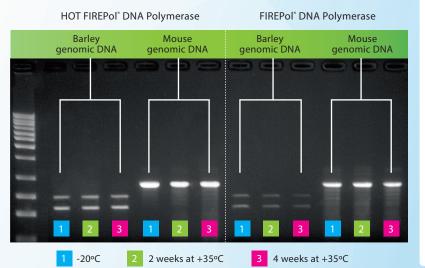
Due to their exceptional stability, Solis BioDyne products can be frozen and thawed over 50 times without any activity loss, resulting in high user confidence of reagent performance right to the the last reaction.

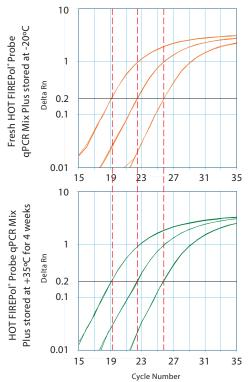


About Us	Stability TAG	qPCR Introduction		Probe Based qPCR Mixes		PCR Enzymes	Other PCR Reagents	Other Enzymes	Ordering & Product List
2	3	introduction	6 NEW	9	10	12	14 (NEW)	17	19

Reagents Stable at +35°C

Our products have been tested for stability at $+35^{\circ}$ C. No change in performance was detected between a fresh lot of qPCR Mix kept at -20° C and the qPCR mix stored at $+35^{\circ}$ C for four weeks. Also, our primary enzymes FIREPol^{*} and HOT FIREPol^{*} DNA Polymerase exhibited no alterations in performance even after four weeks at $+35^{\circ}$ C.







Reaction set-up in +4°C room

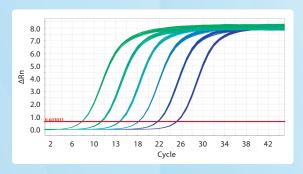
Reaction set-up at room temperature

Reaction set-up on ice

Convenient Set-up at Room Temperature

As all Solis BioDyne products are stable at ambient temperature, reaction set-up does not require ice or other refrigeration systems. There is no need for frequent visits to the freezer, no need for ice baths to be constantly replenished and the reagents can be safely left on the work bench until the procedure is finished. This feature is especially valuable for users of high platforms as keeping cold conditions for hours is quite challenging. Using Solis BioDyne Mixes at room temperature will not affect the reaction performance.

qPCR Introduction



Higher Precision and Wider Scale

All qPCR mixes from Solis BioDyne are produced as 5x mixes that occupy only one fifth of the reaction final volume leaving 2.5 times more room for the template compared with 2x mixes. This is highly advantageous when making wide-range serial dilutions or in case of gene expression studies where the concentration of the target gene is very low. Using the 5x mix enables the researcher to add more cDNA to the reaction which can result in better precision and lower Cycle threshold (Ct) values.

Light Protective Packaging

DNA intercalating dye EvaGreen^{*} and reference dye ROX necessary in many qPCR mixes are sensitive to light and therefore require protective shielding. Solis BioDyne packages all these qPCR mixes in special dark tubes to prevent harm from potential light exposure during transportation and reaction set-up.



Our dye based qPCR Mixes contain EvaGreen[®] dye that has several features such as high sensitivity, low PCR inhibition and ambient temperature stability that set it apart from other DNA-binding dyes used for quantitative real-time PCR applications.

EvaGreen[®] dye

- Highly sensitive produces the most robust PCR
 signal when used at the recommended concentration
- Low PCB inhibition exhibits much less PCB inhibition
- than other detection dyes via a smart "release on demand" DNA-binding technology
- Extremely stable simply indestructible under most
 biochemical conditions
- Can be stored at ambient temperature and be subject to repeated freeze-thaw cycles
- Spectrally similar to other popular dyes compatible
- with all major brand real-time thermal cycle
- Nonmutagenic and noncytotoxi

Mix Compatibility Table

qPCR platforms	Probe based approach	Intercalating dye based approach
Applied Biosystems: QuantStudio™ 12K Flex, ViiA™ 7, 7900HT, 7500, 7700, 7000, StepOne™ & StepOnePlus™ Stratagene: Mx3000P™ & Mx3005P™	5x HOT FIREPol" Probe qPCR Mix Plus (ROX)	5x HOT FIREPol' EvaGreen* qPCR Mix Plus (ROX) 5x HOT FIREPol' EvaGreen* qPCR Supermix
Bio-Rad: CFX96™ & CFX384™, iQ™5 & MyiQ™, Chromo4™, Opticon* 2 & MiniOpticon*Qiagen: Rotor-Gene* Q. Rotor-Gene* 6000; Eppendorf Mastercycler*: ep realplex² & ep realplex4; Illumina: The Eco™ ; Roche: LightCycler* 480	5x HOT FIREPol* Probe qPCR Mix Plus (no ROX)	5x HOT FIREPol' EvaGreen* qPCR Mix Plus (no ROX) 5x HOT FIREPol' EvaGreen* qPCR Supermix
Roche: LightCycler [*] 1.x, LightCycler [*] 2.0	5x HOT FIREPol [®] Probe qPCR Mix Plus (Capillary)	5x HOT FIREPol [®] EvaGreen [®] qPCR Mix Plus (Capillary)

FIREPOI is a trademark of Solis BioDyne. Applied Biosystems and StepOne are trademarks of Applied Biosystems LLC. QuantStudio and ViiA are trademarks of Life Technologies Corporation, Stratagene, M30005, MX3005P are trademarks of Agilent Technologies inc. Mastercycler is a trademark of Eppendorf AG. Rotor-Gene is a trademark of Qiagen GmbH. CFX96, CFX384, iQ, MyiQ, Opticon 2, Cromo4, MiniOpticon are trademarks of Bio-Rad Laboratories. LightCycler is a trademark of Roche Diagnostics GMBH. The Eco is a trademark of Illumina Inc. EvaGreen is a trademark of Biotium Inc.

5x HOT FIREPol® EvaGreen® qPCR Supermix



Description

5x HOT FIREPol^{*} EvaGreen^{*} qPCR Supermix is an optimised ready-to-use solution for real time quantitative PCR assays, including EvaGreen^{*} dye. It comprises all the components necessary, excluding the template and primers, to perform highly sensitive qPCR.

HOT FIREPol[®] DNA Polymerase is activated by a 12 min incubation step at 95°C. Hot-start mechanism prevents extension of non-specifically annealed primers and primer-dimers formed at low temperatures during qPCR setup.

Benefits

- Highly specific and reproducible real time PCR
- Excellent efficiency in case of low copy number targets
- UNG treatment capability due to dNTP blend of dUTP/dTTP
- Superior performance with long (up to 500 bp) and GC-rich templates
- Blue visualisation dye for easy pipetting

Wide Instrument Compatibility

5x HOT FIREPol[®] EvaGreen[®] qPCR Supermix is designed for use with standard cycling mode on standard and fast qPCR platforms regardless of requirements in ROX. The Mix is compatible with:

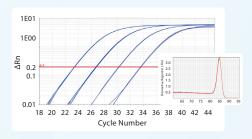
- Applied BioSystems: QuantStudio[™] 12K Flex, ViiA[™] 7, 7900HT, 7500, 7700, StepOneTM & StepOnePlusTM
- Stratagene: MX3000PTM , MX3005PTM
- Bio-Rad: CFX96[™] & CFX384[™], iQ[™]5 & MyiQ[™], Chromo4[™], Opticon[°] 2 & MiniOpticon[°]
- Qiagen: Rotor-Gene® Q, Rotor-Gene® 6000
- Eppendorf: Mastercycler[®]: ep realplex2 & ep realplex4
- Illumina: The Eco™
- Roche: LightCycler[®] 480

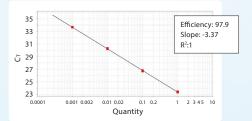
Applications

- Detection and quantification of DNA and cDNA targets
- Profiling gene expression
- Microbial detection
- Viral load determination



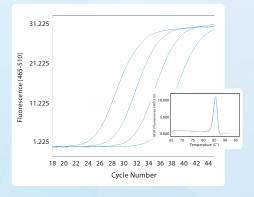


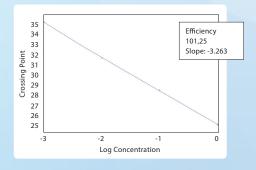




Excellent sensitivity and specificity on various gPCR cyclers

Four tenfold dilutions of 98 bp fragment of GAPDH gene were amplified from human genomic DNA using 5x HOT FIREPol' EvaGreen' qPCR Supermix. Concentration of DNA in one well ranges from 0.01 ng to 10 ng. Reactions were performed on Applied Biosystems ViiA[™]7 Real-Time PCR System (two upper graphs) and on Roche LightCycler' 480 (two lower graphs) following standard cycling protocol.

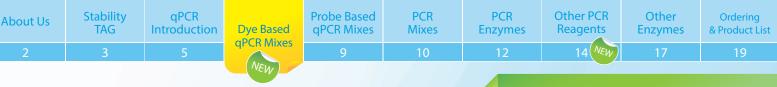




Order Information

РЕОБИСТ	CAT. NO.	RXN/20µl	SIZE/ml	PRICE
5x HOT FIREPol" EvaGreen" qPCR Supermix	08-36-00005	50	0.2	Free sample!
	08-36-00001	250	1	Please inquire!
	08-36-00008	2000	8	Please inquire!
	08-36-00020	5000	20	Please inquire!

FIREPOI is a trademark of Solis BioDyne. Applied Biosystems and StepOne are trademarks of Applied Biosystems LLC. QuantStudio and ViiA are trademarks of Life Technologies Corporation, Stratagene, M30005, MX3005P are trademarks of Agilent Technologies inc. Mastercycler is a trademark of Eppendorf AG. Rotor-Gene is a trademark of Qiagen GmbH. CFX96, CFX384, iQ, MyiQ, Opticon 2, Cromo4, MiniOpticon are trademarks of Bio-Rad Laboratories. LightCycler is a trademark of Roche Diagnostics GMBH. The Eco is a trademark of Illumina Inc. EvaGreen is a trademark of Biotium Inc.



EvaGreen[®] is a registered trademark of BIOTIUM, INC.

Performance data of EvaGreen® qPCR Mix

5x HOT FIREPol® EvaGreen® qPCR Mix Plus

Description

HOT FIREPol^{*} EvaGreen^{*} qPCR Mix Plus is an optimized ready-to-use solution for real-time quantitative PCR assays, including EvaGreen^{*} dye. It comprises all the components necessary to perform qPCR: HOT FIREPol^{*} DNA Polymerase, ultrapure dNTPs, MgCl₂, EvaGreen dye and ROX dye according to system requirements. The user simply needs to add water, template and primers.

EvaGreen^{*} has several features such as high sensitivity, low PCR inhibition and ambient temperature stability that set it apart from other DNA-binding dyes used for quantitative real-time PCR applications.

HOT FIREPOI® DNA Polymerase is inactive at ambient temperatures and therefore requires an incubation step at 95°C for 15 minutes prior to qPCR. This prevents the extension of mis-primed products and primer-dimers formed at low temperatures during qPCR setup.



Features

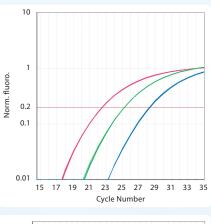
- High sensitivity with broad dynamic range
- Unique stability at ambient temperature
- Based on EvaGreen[®] dye
- Convenient ready-to-use solution
- Reaction set-up without using ice
- Available with ROX reference dye and without ROX
- Mixes compatible with most real-time thermal cyclers

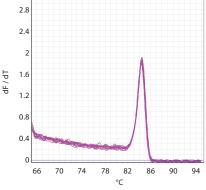
Applications

- Detection and quantification of DNA and cDNA targets
- Profiling gene expression
- Genotyping
- Microbial detection
- Viral load determination

I've been using 5x HOT FIREPol® EvaGreen® qPCR Mix Plus and it has given me constantly excellent results. Comparison tests were made with six suppliers and EvaGreen® qPCR Mix Plus was the only one one that gave necessary efficiency – similar to the mix we were using before. As an extra advantage we also like 5x concentration, that allows us to add twice as much cDNA to the reaction mix and saves room in my freezer.

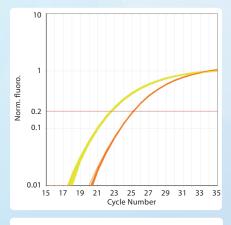
Luis Almonacid Romain Centro Nacional de Biotecnología – CSIC | MADRID - SPAIN

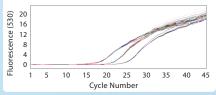




Excellent sensitivity and specificity

The amplification of 98 bp fragment of GAPDH gene exhibits sensitive and efficient reaction curves (upper graph) with highly specific peak in melt curve analysis (lower graph) using HOT FIREPol^{*} EvaGreen^{*} qPCR Mix Plus (no ROX). Amplification was performed on human genomic DNA using Rotor-Gene^{*} 6000 qPCR cycler following cycling protocols recommended by the supplier.

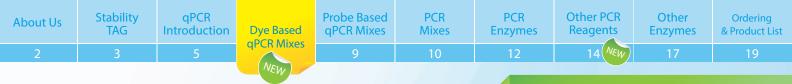




High reproducibility on various qPCR cyclers

Twenty independent amplifications of each dilution show high uniformity and reproducibility on different qPCR platforms. The reactions were carried out on Corbett Rotor-Gene^{*} 6000 (upper graph) using HOT FIREPol^{*} EvaGreen^{*} qPCR Mix Plus (no ROX) and Roche LightCycler 1.5 (lower graph) using HOT FIREPol^{*} EvaGreen^{*} qPCR Mix Plus (Capillary).

Free product samples can be ordered via e-mail: solis@sbd.ee, via skype: solis.biodyne, via fax: +372 7402 079 or via our E-Shop: www.sbd.ee Current prices and conditions are valid until Dec 31, 2013. Some applications these products are used in may require a license which is not provided by the purchase of these products. Users should obtain the license if required.



EvaGreen[®] is a registered trademark of BIOTIUM, INC.

Performance Data of HRM Mix

5x HOT FIREPol® EvaGreen® HRM Mix

Description

HOT FIREPol^{*} EvaGreen^{*} HRM Mix is an optimized ready-to-use solution for High Resolution Melt (HRM) Analysis, including EvaGreen^{*} dye. It includes: HOT FIREPol^{*} DNA Polymerase, ultrapure dNTPs, MgCl₂, EvaGreen dye and ROX dye according to system requirements.

Features

- Sensitive HRM genotyping
- Unique stability at ambient temperature
- Based on EvaGreen[®] dye
- Convenient ready-to-use solution
- Reaction set-up without using ice

Quality Control

- Functional quality control via real-time PCR on different genomic templates
- Tests for stability at ambient temperature
- Tests for multiple freeze-thaw cycles

Selected References

Liebminger E et al, Phytochemistry. 2012. 24-30 Chou M et al. Malaria Journal 2012. 11:295 Elnar AA et al. Toxicology. 2012. 44-54 Gupta A et al. Vaccine. 2012. 6198–6209 Stückemann et al. Development. 2012. 2711-2720 Rawluszko AA et al. BMC Cancer. 2011. 11:522 Mallia B et al. Am. J. of Mol. Bio. 2011. 183-188

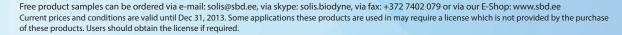
> I am very satisfied with the results of the RT-qPCR I made with the 5× HOT FIREPol[®] EvaGreen[®]qPCR Mix Plus (ROX). It's sensitive to low amount of template and works well with Stratagene Mx3005P[™] thermocycler I use.

Nizar Saad, PhD Student

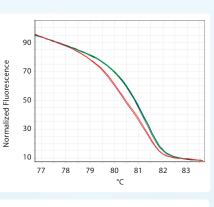
University of Strasbourg Institut de Biologie Moleculaire et Cellulaire FRANCE

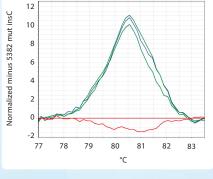
Order Information

PRODUCT	CONTENT	CAT. NO.	RXN/20µl	SIZE/ml	PRICE
5x HOT FIREPol [®] EvaGreen [®]	HOT FIREPol [®] DNA Polymerase,	08-24-0000S	50	0.2	Free sample!
qPCR Mix Plus (ROX)	5x EvaGreen [®] qPCR buffer,	08-24-00001	250	1	Please inquire!
	12.5 mM MgCl ₂ , dNTPs, ROX dye	08-24-00020	5000	20	Please inquire!
5x HOT FIREPol [®] EvaGreen [®]	HOT FIREPol* DNA Polymerase,	08-25-0000S	50	0.2	Free sample!
qPCR Mix Plus (no ROX)	5x EvaGreen [®] qPCR buffer, dNTPs,	08-25-00001	250	1	Please inquire!
	12.5 mM MgCl ₂	08-25-00020	5000	20	Please inquire!
5x HOT FIREPol [®] EvaGreen [®]	HOT FIREPol [®] DNA Polymerase,	08-26-0000S	50	0.2	Free sample!
qPCR Mix Plus (Capillary)	5x EvaGreen° qPCR buffer, dNTPs,	08-26-00001	250	1	Please inquire!
	12.5 mM MgCl ₂ , BSA	08-26-00020	5000	20	Please inquire!
5x HOT FIREPol [®] EvaGreen [®]	HOT FIREPol* DNA Polymerase,	08-33-0000S	50	0.2	Free sample!
HRM Mix (ROX)	5x EvaGreen [®] HRM buffer, dNTPs,	08-33-00001	250	1	Please inquire!
	12.5 mM MgCl ₂ , ROX dye, BSA	08-33-00020	5000	20	Please inquire!
5x HOT FIREPol [®] EvaGreen [®]	HOT FIREPol* DNA Polymerase,	08-31-0000S	50	0.2	Free sample!
HRM Mix (no ROX)	5x EvaGreen [°] HRM buffer, dNTPs,	08-31-00001	250	1	Please inquire!
	12.5 mM MgCl ₂ , BSA	08-31-00020	5000	20	Please inquire!









No.	Color	Name	Genotype	Confidence %
37		Unknown phenotype	5382 wt	99,18
40		Wildtype 1	5382 wt	97,33
41		Wildtype 2	5382 wt	100,00
42		Mutation 1	5382 mut insC	100,00
43		Mutation 2	5382 mut insC	97,47

Sensitive HRM genotyping

High Resolution Melt Analysis was used to genotype a C insertion in BRCA1 gene, a breast cancer susceptibility gene, with HOT FIREPOI' EvaGreen' HRM Mix (two graphs above). Reactions were performed on Corbett Rotor-Gene' 6000. Green lines represent wildtypes without an insertion, red lines represent a C insertion and blue line represents a patient with unknown phenotype.

Performance Data of Probe Mix

Other

Enzymes

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Other PCR

Reagents

14 NEW

5x HOT FIREPol® Probe qPCR Mix Plus

qPCR

Introduction

Description

Stability

TAG

About Us

HOT FIREPol[®] Probe qPCR Mix Plus is an optimized ready-to-use solution for real-time quantitative PCR assays with all the components necessary to perform qPCR: HOT FIREPol[®] DNA Polymerase, ultrapure dNTPs, MgCl₂ and ROX dye according to system requirements. The user simply needs to add water, template, probe and primers. HOT FIREPol[®] Probe qPCR Mix Plus is compatible for use with most real-time thermal cyclers.

HOT FIREPol[®] DNA Polymerase is inactive at ambient temperatures and therefore requires an incubation step at 95°C for 15 minutes prior to qPCR. This prevents the extension of nonspecifically annealed primers and primer-dimers being formed at low temperatures, during qPCR set-up.

Features

- High sensitivity with broad dynamic range
- Unique stability at ambient temperature
- Convenient ready-to-use solution
- Reaction set-up without using ice
- Available with ROX reference dye and without ROX
- Mixes compatible with most real-time thermal cyclers

Applications

- Detection and quantification of DNA and cDNA targets
- Profiling gene expression
- Genotyping
- Microbial detection
- Viral load determination

Quality Control

- Functional quality control via real-time
- PCR on different genomic templates • Tests for stability at ambient temperature
- Tests for multiple freeze-thaw cycles

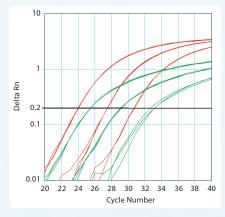
Selected References

Order Information

Zupan J et al, J. of Biomed. Science. 2012. 19:28 Rull K et al. J. Of Clinical Endocrinology & Metabolism 2012. March. 2011-3192 Altraja S et al. J. of Proteomics. 2010. Apr 18. 73(6):1230-40 Tserel L et al. J. of Biological Chemistry. 2011. June. 286 (30)

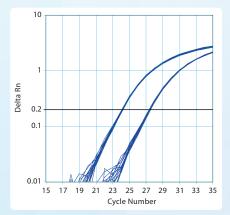
5x HOT FIREPol® Probe HOT FIREPol[®] DNA Polymerase, 08-14-0000S 50 0.2 Free sample! gPCR Mix Plus (ROX) 5x Probe gPCR buffer, 08-14-00001 250 Please inquire! 1 15 mM MgCl₂, dNTPs, ROX dye 08-14-00020 5000 20 Please inquire! 5x HOT FIREPol® Probe HOT FIREPol[®] DNA Polymerase, 08-15-0000S Free sample! 50 0.2 aPCR Mix Plus (no ROX) 5x Probe aPCR buffer. 08-15-00001 250 Please inquire! 1 15 mM MgCl₂, dNTPs 08-15-00020 5000 20 Please inquire! 5x HOT FIREPol® Probe HOT FIREPol[®] DNA Polymerase, 08-16-0000S 50 0.2 Free sample! qPCR Mix Plus (Capillary) 5x Probe qPCR buffer, 08-16-00001 250 Please inquire! 15 mM MgCl₂, dNTPs, BSA 5000 08-16-00020 20 Please inquire!





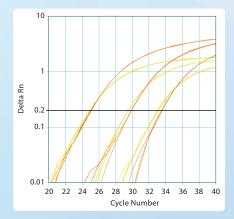
Highly competitive

Three tenfold dilutions of 72 bp fragment of Albumin gene were amplified from human genomic DNA using HOT FIREPOI* Probe qPCR Mix Plus (red) and a qPCR mix from Company A (green). Reactions were performed on Applied Biosystems 7900HT Real-Time PCR System following cycling protocols recommended by the supplier.



Excellent reproducibility

Twenty independent amplifications of each dilution show high uniformity and reproducibility of HOT FIREPol[®] Probe qPCR Mix Plus. Amplification was performed on human genomic DNA using Applied Biosystems 7900HT Real-Time PCR System following cycling protocols recommended by the supplier.



Multiplex compatible

Amplification of FAM labelled target SNA11 (orange) and VIC labelled reference gene HPRT (yellow) was performed in a single reaction using HOT FIREPOl Probe qPCR Mix Plus. This multiplex qPCR was carried out on three tenfold dilutions of human placental cDNA on Applied Biosystems 7900HT Real-Time PCR System.

Free product samples can be ordered via e-mail: solis@sbd.ee, via skype: solis.biodyne, via fax: +372 7402 079 or via our E-Shop: www.sbd.ee Current prices and conditions are valid until Dec 31, 2013

Some applications these products are used in may require a license which is not provided by the purchase of these products. Users should obtain the license if required.

9

About Us	Stability	qPCR	Dye Based	Probe Based
	TAG	Introduction	qPCR Mixes	qPCR Mixes
2	3	5	6 (NEW)	9

PCR **Mixes**

Enzymes

PCR

12

Other PCR Other Ordering Reagents Enzymes & Product List

5x HOT FIREPol® Blend Master Mix **Ready to Load**

Description

5x HOT FIREPol[®] Blend Master Mix is a premixed ready-to-use solution containing all reagents required for PCR except template, primers and water. In addition, the mix includes all compounds necessary for direct loading onto agarose gel with two tracking dyes (blue and yellow) that allow to monitor progress during electrophoresis. Version without the ready-to-load feature is also available.

HOT FIREPol[®] Blend Master Mix contains two carefully optimized enzymes - HOT FIREPol[®] DNA polymerase and a proofreading polymerase. This enzyme blend has both the 5' \rightarrow 3' exonuclease activity as well as the 3' \rightarrow 5' proofreading activity. HOT FIREPol[®] Blend Master Mix exhibits an increased fidelity compared to regular Hot Start Master Mixes. Generated PCR products are compatible with blunt-end cloning procedures.

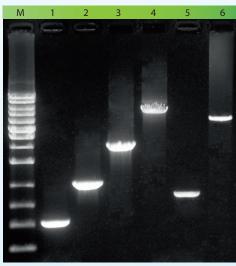
Features

- Stable at ambient temperature for one month
- Reaction set-up without using ice
- Convenient ready-to-use solution for PCR
- o Decreased set-up time
- o Reduced risk of contamination
- o Less pipetting mistakes
- o Consistent reaction to reaction performance
- Includes dyes for direct loading onto agarose gel
- Increased fidelity and sensitivity
- Longer products
- A choice of different MgCl₂ concentrations



Order Information

Performance	Data of	Blend Master



Lane	Template	Amplicon Lenght
1	λDNA	499 bp
2	λDNA	1003 bp
3	λ DNA	1998 bp
4	λDNA	4991 bp
5	Mouse genomic DNA	808 bp
6	Mouse genomic DNA	3838 bp

Amplicons of various length from different templates Lines 1-4 present excellent amplification of fragments of various lenght from λ DNA. Lines 5 and 6 show two different amplicons amplified from mouse genomic DNA. All these reactions were carried out using 5 x HOT FIREPol® Blend Master Mix Ready to Load with 7.5 mM MgCl,.

The mycology and ecology of biological interaction work groups of Tartu University have shifted to the use of 5x FIREPol® Blend Master Mix in the PCR analyses involving DNA extracted from fungi, plant tissues and soil. This Master Mix outperforms other products of other companies, because it is easy to store and use, and it provides amplicons at the presence of minor inhibitors. Perhaps most importantly, the price of 5x FIREPol® Blend Master Mix is the lowest among products of similar quality, which makes it suitable for governmental institutions that have a restricted budget.

I have found it especially suitable for large-scale Next Generation sequencing analyses, where multiple PCR replicates need to be prepared simultaneously requiring thousands of PCR reactions in a short period of time.

PRODUCT	CONTENT	CAT. NO.	RXN/20µl	SIZE/ml	PRICE
5x HOT FIREPol°	HOT FIREPol [®] DNA Polymerase,	04-25-00515	25	0.1	Free sample!
Blend Master Mix	Proofreading enzyme, 5x Blend	04-25-00115	250	1	Please inquire!
Ready to Load with 7.5 mM MgCl ₂	Master Mix Buffer, 7.5 mM MgCl ₂ , dNTPs, BSA, Blue and Yellow loading dye	04-25-02015	5000	20	Please inquire!
5x HOT FIREPol [®]	HOT FIREPol [®] DNA Polymerase,	04-25-00520	25	0.1	Free sample!
Blend Master Mix	Proofreading enzyme, 5x Blend	04-25-00120	250	1	Please inquire!
Ready to Load with 10 mM MgCl ₂	Master Mix Buffer, 10 mM MgCl ₂ , dNTPs, BSA, Blue and Yellow loading dye	04-25-02020	5000	20	Please inquire!
5x HOT FIREPol®	HOT FIREPol [®] DNA Polymerase,	04-25-00525	25	0.1	Free sample!
Blend Master Mix Ready to Load	Proofreading enzyme, 5x Blend Master Mix Buffer, 12.5 mM MgCl _a ,	04-25-00125	250	1	Please inquire!
with 12.5 mM MgCl ₂	dNTPs, BSA, Blue and Yellow loading dye	04-25-02025	5000	20	Please inquire!
5x HOT FIREPol° Blend Master Mix	HOT FIREPol [®] DNA Polymerase, Proofreading enzyme, 5x Blend	04-25-00530	25	0.1	Free sample!
Ready to Load	Master Mix Buffer, 15 mM MgCl.,	04-25-00130	250	1	Please inquire!
with 15 mM MgCl ₂	dNTPs, BSA, Blue and Yellow loading dye	04-25-02030	5000	20	Please inquire!

Leho Tedersoo, PhD Institute of Ecology and Earth Sciences, Natural History Museum, University of Tartu,

Free product samples can be ordered via e-mail: solis@sbd.ee, via skype: solis.biodyne, via fax: +372 7402 079 or via our E-Shop: www.sbd.ee Current prices and conditions are valid until Dec 31, 2013

Some applications these products are used in may require a license which is not provided by the purchase of these products. Users should obtain the license if required.

Performance data of Master Mix

Other

Enzymes

Other PCR

Reagents

14 NEW

5x FIREPol[®] Master Mix 5x FIREPol® Master Mix Ready to Load

Description

Stability

TAG

About Us

5x FIREPol[®] Master Mix is a premixed ready-to-use solution containing all reagents required for PCR (except template, primers and water). Ready to Load format also includes a compound needed for direct loading onto agarose gel and two tracking dyes (blue and yellow) that allow to monitor progress during electrophoresis.

We recommend using 5x FIREPol® Master Mix Ready to Load in any PCR application that will be visualized by agarose gel electrophoresis and ethidium bromide staining. 5x FIREPol[®] Master Mix Ready to Load is not recommended for use in post-PCR applications where spectro-photometric measurements (absorbance or fluorescence) are necessary because yellow and blue dyes can interfere with these applications.

Features

- Stable at ambient temperature for one month
- Reaction set-up without using ice
- Convenient ready-to-use solution for PCR
- o Decreased set-up time
- o Reduced risk of contamination
- o Less pipetting mistakes
- o Consistent reaction to reaction performance
- · Ready to Load format includes dyes for direct loading
- A choice of two MgCl, concentrations

Applications

- Wide range of PCR assays
- PCR product generation for TA cloning
- Ready to Load Master Mix for easy visualization on gel



Order Information

PRODUCT	CONTENT	CAT. NO.	RXN/20µl	SIZE/ml	PRICE
5x FIREPol [®] Master Mix	FIREPol [®] DNA Polymerase,	04-11-00515	25	0.1	Free Sample!
with 7.5 mM MgCl ₂	5x Buffer B, 7.5 mM MgCl ₂ , dNTPs, Detergent	04-11-00115	250	1	Please inquire!
5x FIREPol [®] Master Mix with 12.5 mM MgCl ₂	FIREPol* DNA Polymerase, 5x Buffer B, 12.5 mM MgCl ₂ ,	04-11-00S25	25	0.1	Free Sample!
with 12.5 million MgCl ₂	dNTPs, Detergent	04-11-00125	250	1	Please inquire!
5x FIREPol' Master Mix Ready to Load	FIREPol* DNA Polymerase, 5x Buffer B, 7.5 mM MgCl., dNTPs,	04-12-00S15	25	0.1	Free Sample!
with 7.5 mM MgCl ₂	Detergent, Blue and Yellow Loading Dyes	04-12-00115	250	1	Please inquire!
5x FIREPol [®] Master Mix Ready to Load	FIREPol* DNA Polymerase, 5x Buffer B, 12.5 mM MgCl _a , dNTPs,	04-12-00525	25	0.1	Free Sample!
with 12.5 mM MgCl ₂	Detergent, Blue and Yellow Loading Dyes	04-12-00125	250	1	Please inquire!



Plant genomic DNA

672 bp fragment was amplified from barley genomic DNA using FIREPol Master Mix (lane 1-3) and FIREPol Master Mix Ready to Load (lane 4-6). Template DNA was serially diluted tenfold from a starting concentration of 1 ng/ μ l. The Master Mixes performed well even with the template's concentration being as low as 0.01 ng/µl.



Every week, we have to genotype hundreds of mice. when I received my first FIREPol[®] Master Mix RTL, because of its low price, and it was too convenient to be true! Turns out it works with all our PCR reactions. You don't even need top notch DNA extraction

Nicolas Renier Institut de la Vision **INSERM** FRANCE

Free product samples can be ordered via e-mail: solis@sbd.ee, via skype: solis.biodyne, via fax: +372 7402 079 or via our E-Shop: www.sbd.ee Current prices and conditions are valid until Dec 31, 2013 Some applications these products are used in may require a license which is not provided by the purchase of these products. Users should obtain the license if required.

Other Ordering Enzymes & Product List

Performance data of HOT FIREPol®

Other PCR

Reagents

14 NEW

HOT FIREPol® DNA Polymerase

Description

HOT FIREPol^{*} DNA Polymerase is a chemically modified FIREPol^{*} DNA Polymerase. At ambient temperatures it is inactive, having no polymerization activity. HOT FIREPol^{*} DNA Polymerase is activated by a 15 min incubation step at 95°C. This prevents extension of non-specifically annealed primers and primer-dimers formed at low temperatures during PCR setup. The enzyme has $5' \rightarrow 3'$ polymerase and exonuclease activity but lacks $3' \rightarrow 5'$ exonuclease activity.

Features

- Exceptional stability at ambient temperature
- Increased sensitivity, specificity and yield
- Two buffers and an enhancer for personal optimization
- Supply of active enzyme throughout the entire PCR
- Extension rate 2-4 kb/min at 72°C
- Error rate per nucleotide per cycle: ~2.5 x 10⁻⁵
- Estimated half life at 95°C is 1.5 hours

Applications

- Hot Start PCR
- DHPLC
- TA cloning

Quality Control

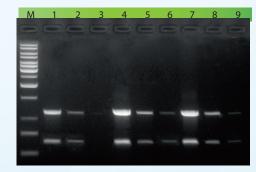
- Amplification efficiency $\geq 10^5$ fold
- Functional quality control via PCR
- on different templates
- HOT FIREPol^{*} is free of nicking and priming activities, exonucleases and unspecific endonucleases



Selected References

Newmana DP et al, Neuropsychologia, 2012. 2823–28 Barrandeguy ME et al, Am. J. Botany. 2012. 372-374. Landvik NE et al, Journal of Human Genetics. 2012. Haidera M et al, Veterinary Parasitology. 445–451. Dilla P et al, Molecular Genetics and Metabolism. 362–368. Bertia B et al, J. of Electroanalytical Chemistry, 2011. 55–60. Mader E et al, Analytic Biochemistry, 2010. 153-155 Homolka A et al, American J. of Bot. 2010. Mischek D et al, J. Biomed. Biotechnol. 2009. Maron E et al, Eur Neuropsychopharmacol. 2009. Wilcke A et al. Ann Dyslexia. 2009. Krjutskov K et al, Nucleic Acids Res. 2008 Jul;36(12):e75. Zinkstok J et al, Psychiatry Res. 2008 Jan 15;157(1-3):1-8. Meade KG et al, BMC Genomics. 2007 Oct 31;8:400.

Pruunsild P et al, Genomics. 2007 Sep;90(3):397-406.



Mouse Genomic DNA

1183 bp and 643 bp fragments were amplified from mouse genomic DNA using HOT FIREPOl^{*} DNA Polymerase together with three buffers: A1 (lane 1-3), B1 (lane 4-6) and B2 (lane 7-9). Template DNA was serially diluted tenfold with a starting concentration of 1 ng/µl. The enzyme performed well even with the template's concentration being as low as 0.01 ng/µl. HOT FIREPOl^{*} DNA Polymerase was used at 0.04 U/µl.



Plant Genomic DNA

672 bp fragment was amplified from barley genomic DNA using HOT FIREPol' DNA Polymerase together with three buffers: A1 (lane 1-3), B1 (lane 4-6) and B2 (lane 7-9). Template DNA was serially diluted tenfold with a starting concentration of 1 ng/µl. The enzyme performed well even with the template's concentration being as low as 0.01 ng/µl. HOT FIREPol' DNA Polymerase was used at 0.04 U/µl.

Thanks to our good experience with Solis BioDyne, we have been using their HOT FIREPol[®] DNA Polymerase as a stardard enzyme in our PCR, one of the applications being microsatellite genotyping in various species of trees.

Dr. Ludger Leinemann Georg-August University of Göttingen GERMANY

1.				
PRODUCT	CONTENT	CAT. NO.	SIZE/U	PRICE
HOT FIREPol®	HOT FIREPol [®] DNA Polymerase,	01-02-0000S	100	Free Sample
DNA Polymerase (5 U/μl)	10x Buffer B1/B2, 25 mM MgCl ₂ ,	01-02-00500	500	Please inquire
	Solution S	01-02-01000	1000	Please inquire

Free product samples can be ordered via e-mail: solis@sbd.ee, via skype: solis.biodyne, via fax: +372 7402 079 or via our E-Shop: www.sbd.ee Current prices and conditions are valid until Dec 31, 2013 Some applications these products are used in may require a license which is not provided by the purchase of these products. Users should obtain the license if required.

Ordering & Product List

Performance data of FIREPol®

Other

Enzymes

Other PCR

Reagents

14 NEW

FIREPol® DNA Polymerase

Description

FIREPol° is a highly processive, thermostable DNA Polymerase. Due to its genetic modifications FIREPol° has an enhanced stability at ambient temperature with no activity loss for up to 1 month. The enzyme has $5' \rightarrow 3'$ polymerase and exonuclease activity but lacks $3' \rightarrow 5'$ exonuclease activity.

Features

- · Exceptional stability at ambient temperature
- Selection of buffers and an enhancer for personal optimization
- Extension rate 2-4 kb/min at 72°C
- Error rate per nucleotide per cycle: ~2.5 x 10⁻⁵
- Estimated half life at 95°C is 1.5 hours

Applications

- Wide range of PCR assays
- TA cloning

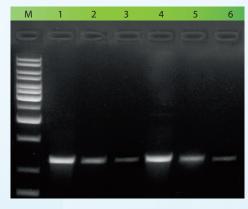
Quality Control

- Amplification efficiency ≥10⁵ fold
- Functional quality control via PCR on different templates
- FIREPol[®] is free of nicking and priming activities, exonucleases and unspecific endonucleases

Selected References

Kaser M et al, J Medical Microbiol Diagnosis. 2012. Antonius K et al, Genetic Resources and Crop Evolution. 2012. Dreyer AM et al, J.of Immunology. 2012. 6225-6237 Prischl M et al, Applied Soil Ecology. 2012. 39-48 Szukicsa U et al, Microbiological Research. 103–109 Postma W et al, Plant Physiology. 2012. 112.200188 Mwingira F et al, Malaria Journal. 2011, 10:79 Silvar C et al, Plant Breeding. 2011. Grund E et al, Journal of Phytopathology. 2010. Vukich M et al, BMC Plant Biology 2009. 9:150 Fuhrmann N et al, J Med Genet. 2009 Feb;46(2):136-44. Barnadas C et al, Antimicrob Agents Chemother. 2008 Dec;52(12):4233-40. Mariette N et al, Malar J. 2008 Oct 28;7:219. Radoev M et al, Genetics. 2008 Jul;179(3):1547-58. Huber CA et al, Clin Vaccine Immunol. 2008 Apr;15(4):598-606. Crameri A et al, J Clin Microbiol. 2007 Nov;45(11):3685-91. Tamm E et al, PLoS ONE. 2007 Sep 5;2(9):e829. Galaal K et al, Int J Gynecol Cancer. 2007 Jan-Feb;17(1):94-100.





Mouse Genomic DNA

1200 bp fragment of Beta-synuclein gene was amplified from mouse genomic DNA using FIREPol® DNA Polymerase with two different buffers: B (lane 1-3) and BD (lane 4-6). Template DNA was serially diluted tenfold with starting concentration of 1 ng/µl. FIREPol[®] DNA Polymerase was used at 0.04U/µl.



Plant Genomic DNA

672 bp fragments was amplified from barley genomic DNA using FIREPol® DNA Polymerase with two buffers: B (lane 1-3) and BD (lane 4-6). Template DNA was serially diluted tenfold with a starting concentration of 1 ng/ $\!\mu l$. The enzyme performed well even with the template's concentration being as low as 0.01 ng/µl. FIREPol* DNA Polymerase was used at 0.04 U/µl.

I have used Solis Biodyne's FIREPol[®] Tag for studying retrotransposon-based genetic polymorphism in plants and it worked very well.

Dr Lucia Natali Dipartimento di Biologia delle Piante Agrarie Universita Degli Studi di Pisa

ITALY

Order Information

PRODUCT	CONTENT	CAT. NO.	SIZE/U	PRICE	
FIREPol [®] DNA Polymerase (5 U/µl)	FIREPol [®] DNA Polymerase, 10x Buffer B/BD, 25 mM MgCl.,	01-01-00005	100	Free Sample! Please inquire!	_
· · · · · · ·	Solution S	01-01-01000	1000	Please inquire!	_
		01-01-02000	2000	Please inquire!	



Free product samples can be ordered via e-mail: solis@sbd.ee, via skype: solis.biodyne, via fax: +372 7402 079 or via our E-Shop: www.sbd.ee Current prices and conditions are valid until Dec 31, 2013

Some applications these products are used in may require a license which is not provided by the purchase of these products. Users should obtain the license if required.



About Us	Stability TAG	qPCR Introduction		Probe Based qPCR Mixes		PCR Enzymes	Other PCR Reagents	Other Enzymes	Ordering & Product List
2		5	6 (NEW)	9	10	12	neugents	17	19

dNTP Set and Mix



Description

All Solis BioDyne's dNTPs are chemically synthesized nucleotides that are 99% pure by HPLC. Our nucleotides are available as a dNTP set containing four separate solutions of dNTPs and as ready-to-use mix of dATP, dCTP, dGTP and dTTP. Ready-to-use dNTP mix can be added directly to amplification reaction, and is designed to save time, reduce the risk of contamination and ensure the reproducibility of results. A separate vial of dUTP is available at a concentration of 100 mM.

Stability

All Solis BioDyne's dNTPs are extra stable - we guarantee 100% stability for 3 years thanks to our special storage buffer.

Features

- Ultrapure: >99% by HPLC
- Reliable, consistent results
- Available both as a ready-to-use mix and a set
- Wide range of applications

Applications

- Suited for a wide range of PCR and qPCR applications
- cDNA synthesis
- Primer extension
- DNA sequencing
- DNA labeling
- Mutagenesis

Quality Control

- Purity assay (HPLC) >99%
- Free of pyrophosphate, DNA and RNA
- DNase, RNase and nickase free
- Tested for qPCR, PCR and reverse transcription applications

I compared the Solis BioDyne 20 mM dNTP mix with those of another leading supplier and analysed their performance during the development of a client's real-time PCR assay. I was very impressed with their repeatedly high performance with similar or often lower Cq's generated by the Solis BioDyne mix

John Mackay Lead Scientist Linnaeus Laboratories | NEW ZEALAND

Order Information

PRODUCT	CONTENT	CAT. NO.	SIZE/µmol	PRICE
dNTP Set	A set of dATP, dCTP, dTTP and dGTP in separate vials (100mM of each)	02-21-0001S 02-21-00100 02-21-00400	4 x 0.5 4 x 25 4 x 100	Free Sample! Please inquire! Please inquire!
dNTP Mix	Mix of dATP, dCTP, dTTP and dGTP (20 mM of each)	02-31-00015 02-31-00020 02-31-00100	0.8 20 100	Free Sample! Please inquire! Please inquire!
dUTP	100 mM dUTP	02-41-0000S 02-41-00025	2.5 25	Free Sample! Please inquire!

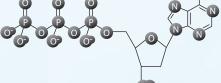
Free product samples can be ordered via e-mail: solis@sbd.ee, via skype: solis.biodyne, via fax: +372 7402 079 or via our E-Shop: www.sbd.ee Current prices and conditions are valid until Dec 31, 2013

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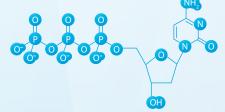


Structural Formulas of dNTPs

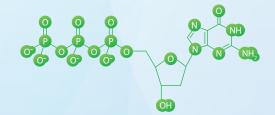


dCTP

Formula: C₉H₁₂N₃O₁₃P₃ (Anion) Formula Weight: 463.15 (Anion)



dGTP Formula: $C_{10}H_{12}N_5O_{13}P_3$ (Anion) Formula Weight: 503.18 (Anion)



dTTP Formula: $C_{10}H_{12}N_5O_{13}P_3$ (Anion) Formula Weight: 478.16 (Anion)



& Product List

100 bp DNA Ladder 1 kb DNA Ladder

Description

About Us

The 1 kb DNA Ladder and the 100 bp DNA Ladder are ready-to-use molecular weight markers suitable for DNA fragment size determination on gel electrophoresis. They are formulated to run accurately and to provide crisp band patterns with blue dyes to serve as visual aid to monitor the progress of migration during agarose gel electrophoresis. The 1 kb DNA Ladder contains 13 discrete DNA fragments ranging from 300 bp to 10,000 bp. The 100 bp DNA Ladder contains 12 discrete DNA fragments ranging from 100 bp to 3,000 bp.

6x DNA Loading Dye Buffers are used to prepare DNA markers and samples for loading on agarose or polyacrylamide gels. The optimized solutions contain different mixtures of three dyes: Bromophenol Blue, Xylene Cyanol FF and Orange

6x DNA Loading Dye Buffers containing Orange G are recommended for the

analysis of small DNA molecules and have no DNA masking during gel exposure

to UV light. 6 x DNA Loading Dye Buffer Blue and Dye Buffer Double Blue make

G for visual tracking of DNA migration during electrophoresis.

pipetting visually easy with its dark blue color.

Features

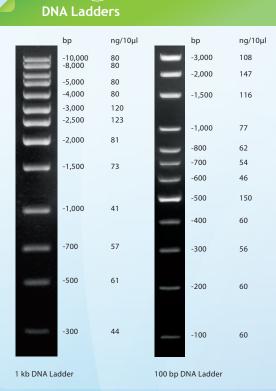
- Ready-to-use solutions
- Crisp band patterns

Description

- Includes dyes for ease of use
- Stable at ambient temperature

6x DNA Loading Dye Buffers





Loading Dye Buffers



Line 1: DNA Loading Dye Buffer Blue Line 2: DNA Loading Dye Buffer Double Blue Line 3: DNA Loading Dye Buffer Orange and Blue Line 4: DNA Loading Dye Buffer Orange

In 1% agarose gel 1x TBE, Xylene Cyanol FF migrates along with~3500 bp fragments, Bromophenol Blue migrates along with ~300 bp fragments and Orange G migrates along with ~40 bp fragments.

Order Information

PRODUCT	CONTENT	CAT. NO.	SIZE	PRICE
100 bp DNA Ladder	12 discrete DNA fragments ranging	07-11-0000S	1.5 µg	Free Sample!
Ready to Load	from 100 bp to 3,000 bp	07-11-00050	50 µg	Please inquire!
1 kb DNA Ladder	13 discrete DNa fragments ranging	07-12-0000S	1.5 µg	Free Sample!
Ready to Load	from 300 bp to 10,000 bp	07-12-00050	50 µg	Please inquire!
6x DNA Loading	Bromophenol Blue, 6x Dye Buffer	07-01-0000S	0.1 ml	Free Sample!
Dye Buffer Blue		07-01-00001	1 ml	Please inquire!
		07-01-00010	10 ml	Please inquire!
6x DNA Loading	Bromphenol Blue and Xylane Cyanole,	07-02-00005	0.1 ml	Free Sample!
Dye Buffer Double Blue	6x Dye Buffer	07-02-00001	1 ml	Please inquire!
		07-02-00010	10 ml	Please inquire!
6x DNA Loading	Orange G and Xylene Cyanole,	07-03-00005	0.1 ml	Free Sample!
Dye Buffer Orange and Blue	6x Dye Buffer	07-03-00001	1 ml	Please inquire!
		07-03-00010	10 ml	Please inquire!
6x DNA Loading	Orange G, 6x Dye Buffer	07-04-0000S	0.1 ml	Free Sample!
Dye Buffer Orange		07-04-00001	1 ml	Please inquire!
		07-04-00010	10 ml	Please inquire!

Free product samples can be ordered via e-mail: solis@sbd.ee, via skype: solis.biodyne, via fax: +372 7402 079 or via our E-Shop: www.sbd.ee Current prices and conditions are valid until Dec 31, 2013 Some applications these products are used in may require a license which is not provided by the purchase of these products. Users should obtain the license if required.

About Us	Stability TAG	qPCR Introduction		Probe Based qPCR Mixes		PCR Enzymes	Other PCR Reagents	Other Enzymes	Ordering & Product List
2		5	6 NEW	9	10	12	Reagents	17	19

10x GC- rich Enhancer

Description

10x GC-rich Enhancer is used as PCR additive for difficult GC-rich templates. The optimized solution modifies melting behavior of nucleic acids and often enhances amplification of suboptimal PCR systems with high degree of secundary structures and GC-rich regions.

10x GC-rich Enhancer should be used at a defined working concentration (1x, 2x or 3x solution) and only if non-specific amplification occurs.

Applications

Additive for PCR reaction

25mM MgCl₂ Solution

Description

Magnesium Chloride $(MgCl_2)$ is an important component of PCR reactions. Concentration of $MgCl_2$ should be optimized according to reaction conditions (primer, template, dNTP, polymerase concentration).

Applications

- Optimization of PCR, qPCR and RT-PCR reactions
- All other molecular biology techniques where MgCl, is needed

PCR Grade Water*

Description

PCR Grade Water is deionized and autoclaved water suitable for use in all experiments that require nuclease-free water. PCR Grade Water is prepared without chemical additives and it is Dnase, Rnase and nuclease-free.

Applications

- PCR, qPCR and RT-PCR
- All other molecular biology techniques where pure water is needed

*General shipping terms do not apply for PCR Grade Water. Please contact us for shipping cost quotation.

Order Information

PRODUCT	CAT. NO.	SIZE/ml	PRICE
10x GC-rich Enhancer	05-16-00001	0.1	Free Sample!
	05-16-00010	1	Please inquire!
	05-16-00050	5	Please inquire!
	05-16-00200	20	Please inquire!
25 mM MgCl ₂	05-11-00012	1.2	Please inquire!
	05-11-00050	5	Please inquire!
	05-11-00200	20	Please inquire!
PCR Grade Water	water-025	25	Please inquire!
	water-100	100	Please inquire!
	water-500	500	Please inquire!



Free product samples can be ordered via e-mail: solis@sbd.ee, via skype: solis.biodyne, via fax: +372 7402 079 or via our E-Shop: www.sbd.ee Current prices and conditions are valid until Dec 31, 2013 Some applications these products are used in may require a license which is not provided by the purchase of these products. Users should obtain the license if required.







About Us	Stability TAG	qPCR Introduction	Dye Based qPCR Mixes	Probe Based qPCR Mixes		PCR Enzymes	Other PCR Reagents	Other	Ordering & Product List
2	3	5	6 (NEW)	9	10	12	14 NEW	Enzymes	19

TERMIPol® DNA Polymerase

Description

TERMIPol^{*} DNA Polymerase is a thermostable DNA Polymerase suited for MALDI-TOF mass spectrometry and other primer extension platforms. The enzyme has $5' \rightarrow 3'$ polymerase activity and enhanced efficiency for incorporating unconventional nucleotides such as dideoxynucleotides and acyclonucleotides. TERMIPol^{*} is available in two concentrations: 5 U/µl and 25 U/µl.

HOT TERMIPol[®] DNA Polymerase adds extra value with its Hot Start function, preventing the extension of mis-primed products and primer-dimers being formed at low temperatures during reaction setup. HOT TERMIPol[®] DNA Polymerase requires an incubation step at 95°C for 15 minutes.

Features

- Enhanced efficiency for incorporating ddNTPs
- Assay success rate of 99% in MALDI-TOF
- Very high incorporation rate
- Robust and reliable reactions
- Excellent stability at ambient temperature
- Error rate per nucleotide per cycle: ~8 x 10⁻⁵
- Estimated half life at 95°C is 1.5 hours

Applications

- MALDI-TOF mass spectrometry
- Primer extension
- MassARRAY

Quality Control

- Free of nicking and priming activities, exonucleases and unspecific endonucleases
- Activity and stability tested via thermocycling

Selected References

Geistlingera J et al, Clinica Chimica Acta. 2012. Vol. 413 Wilcke A et al, Ann Dyslexia. 2009 Feb 24. Ikryannikova LN et al, J Microbiol Methods. 2008 Dec;75(3):385-91. Ilina EN et al, Antimicrob Agents Chemother. 2008 Jun;52(6):2175-82. Schwab M et al, J Clin Oncol. 2008 May 1;26(13):2131-8. Mezger M et al, Clin Microbiol Infect. 2008 Mar;14(3):228-34. Crameri A et al, J Clin Microbiol. 2007 Nov;45(11):3685-91. Mikeska T et al, J Mol Diagn. 2007 Jul;9(3):368-81. Tikka-Kleemola P, Mol Cell Probes. 2007 Jun;21(3):216-21. Afanas'ev MV et al, J Antimicrob Chemother. 2007 Jun;59(6):1057-64 Blievernicht JK et al, Clin Chem. 2007 Jan;53(1):24-33. I used Solis BioDyne's TERMIPol" DNA polymerase for genotyping on MALDI-TOF platform. The performance was comparable to similar enzymes on the market and the price was highly competitive. The results of this work were published in Mol Cell Probes, 2007.

Kaisa Silander, Ph.D, senior researcher Institute of Molecular Medicine Finland (FIMM), University of Helsinki | FINLAND



Schaeffeler E et al, Hum Mutat. 2006 Sep;27(9):976. Loboz KK et al, Clin Pharmacol Ther. 2006 Jul;80(1):75-84. Kepper P et al, Clin Chem. 2006 Jul;52(7):1303-10. Giancola S et al, Theor Appl Genet. 2006 Apr;112(6):1115-24. Sauer S et al, Nat Protoc. 2006;1(4):1761-71. Balbus N, Humeny et al, Mamm Genome. 2005 Nov;16(11):884-92. Ilina EN et al, J Clin Microbiol. 2005 Jun;43(6):2810-5. Petkovski E et al, J Forensic Sci. 2005 May;50(3):535-41. Lovmar L et al, BMC Genomics. 2005 Mar 10;6(1):35.

Order Information

PRODUCT	CONTENT	CAT. NO.	SIZE/U	PRICE
TERMIPol* DNA Polymerase (5 U/μl)	TERMIPOl [*] DNA Polymerase, 10x Buffer C, 100 mM MgCl ₂	01-03-00005 01-03-00500 01-03-02000	500 500 2000	Free Sample! Please inquire! Please inquire!
TERMIPol* DNA Polymerase HC (25 U/μl)	TERMIPol [*] DNA Polymerase, 10x Buffer C, 100 mM MgCl ₂	01-07-00005 01-07-01000 01-07-05000	1000 1000 5000	Free Sample! Please inquire! Please inquire!
HOT TERMIPol* DNA Polymerase (5 U/µl)	HOT TERMIPol' DNA Polymerase, 10x Buffer C, 100 mM MgCl ₂	01-06-0000S 01-06-00500 01-06-02000	500 500 2000	Free Sample! Please inquire! Please inquire!



TERMIPol is a trademark of Solis BioDyne.

Free product samples can be ordered via e-mail: solis@sbd.ee, via skype: solis.biodyne, via fax: +372 7402 079 or via our E-Shop: www.sbd.ee Current prices and conditions are valid until Dec 31, 2013

Some applications these products are used in may require a license which is not provided by the purchase of these products. Users should obtain the license if required.

About Us	Stability TAG	qPCR Introduction	qPCR Mixes	Probe Based qPCR Mixes		PCR Enzymes	Other PCR Reagents	Other	Ordering & Product List
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RNase H activity

M-MLV Reverse Transcriptase RNase H Minus DNA Polymerase

Description

The M-MLV Reverse Trancriptase RNase H Minus DNA Polymerase is a genetically modified M-MLV RT which exhibits RNA or DNA dependent DNA polymerase, but lacks ribonuclease H activity. This enzyme can synthesize a complementary DNA strand initiating from a primer using RNA or DNA templates. Removal of the RNase H activity results in an increase of full-length cDNA products. The enzyme has RNA polymerization-dependent and DNA polymerization dependent activities but lacks ribonuclease H activity.

Features

- No RNase H activity
- High sensitivity
- Improved efficiency for full length cDNA synthesis

Applications

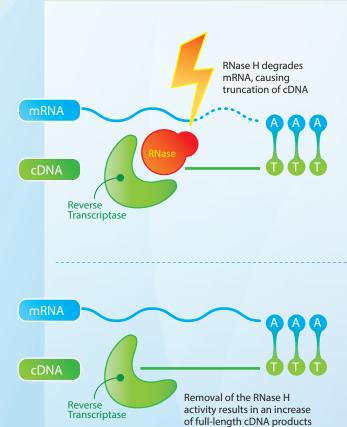
- cDNA synthesis
- RNA analysis by primer extension
- DNA labeling
- cDNA compatible with real-time PCR

Quality Control

- Free of endo- and exonucleases, phosphatases and ribonucleases
- Activity and stability tested in first strand cDNA synthesis

One of our main approaches for the analysis of bisulfite-PCR products is methylation-dependent primer extension followed by HPLC separation. Previously we used the Thermo Sequenase from Amersham for the incorporation reaction. When using TERMIPOl' in combination with buffer C, we observed a 3-fold increase of incorporation. TERMIPOl' is more cost-efficient and it can even be used with 2 or 3 primers within the same reaction without increasing enzyme concentration.

As a standard approach, we perform RT-PCRs to check for the influence of DNA methylation changes on gene expression. Due to an advertisement by Solis BioDyne we switched from Promega to their RT enzyme. We observed a similar performance of both enzymes obtaining full processivity, also on long mRNA molecules.



Again, the RT from Solis BioDyne was more cost-efficient so we started routine using this enzyme for random-primed and oligo-dT-primed reverse transcription.

Taken together, our long-lasting experience with the mentioned enzymes from Solis BioDyne is reflected in reliable results presented in several publications. Therefore, we recommend their usage for scientific purposes.

Dr. Sascha Tierling Saarland University, Germany | GERMANY

Order Information

PRODUCT	CONTENTS	CAT. NO.	SIZE	PRICE
M-MLV Reverse Transcriptase RNase H Minus (200 U/µl)	M-MLV RT RNase H Minus, 5 x RT Buffer 1, 5 x RT Buffer 2, 25 mM MgCl _{2,} 20 mM MnCl ₂ ,100 mM DTT	06-21-000005 06-21-010000 06-21-050000	2000 U 10000 U 50000 U	Free Sample! Please inquire! Please inquire!

Free product samples can be ordered via e-mail: solis@sbd.ee, via skype: solis.biodyne, via fax: +372 7402 079 or via our E-Shop: www.sbd.ee This product is not available in US. Current prices and conditions are valid until Dec 31, 2013. Some applications these products are used in may require a license which is not provided by the purchase of these products. Users should obtain the license if required.

Ordering

All Solis BioDyne products are shipped at ambient temperature. Our products can withstand ambient temperature up to 1 month without any loss of activity. However, regular storage at -20°C is recommended.

Free samples

Solis BioDyne provides free samples of the entire product range enabling our clients to thoroughly test our product:

How to Order

Orders can be placed

- Via E-Shop: www.sbd.ee
- By emailing at solis@sbd.ee
- Through fax: +372 7402 079

Required Information

Following information is required while placing an order: Product name, specifications regarding additives

- Shipping and invoice address
- VAT number (EU only)





Shipping Cost*

In case of free samples, the recipient is expected to contribute to the shipping cost of express courier service (35€). This shipping cost will be deducted from the first purchase order. For orders smaller than \in 200 shipping cost \in 50 will apply. Starting from order value \in 200 shipping cost \in 35 will apply. Shipping cost for orders exceeding €1000 will be covered by Solis BioDyne.

* General shipping terms do not apply for PCR Grade Water. Please contact us for shipping cost quotation.

Customer Care

We are committed to providing our customers excellent service. All inquiries will be responded to within 24 hours at most. All technical questions will be given high priority and our full attention.

Please contact us through Skype: support.sbd or via E-mail: solis@sbd.ee

Customized solutions

This product catalogue contains standard products, tube sizes and kits. Solis BioDyne offers customized solutions to its customers. Please contact us for details about this service.

Please contact us for enquiries or free samples!

About Us	Stability TAG			Probe Based qPCR Mixes		PCR Enzymes	Other PCR Reagents	Other Enzymes	Ordering &
2	3	5	6 (NEW)	9	10	12	14 NEW	17	Product List

Shipping

Unless agreed otherwise, all shipments abroad will be arranged via TNT express. If you wish your order to be shipped by a different carrier, please contact us. After receiving an order within working hours (Monday to Friday, 8AM to 5PM, UTC+2) we will send you an order confirmation within one working day. In most cases orders are shipped within one or two working days.

Taxes and Other Charges

Any additional taxes, fees or charges imposed by any governmental authority or bank shall be paid by you in addition to the prices quoted or invoiced.Orders can also placed from outside of EU, please check with your local customs about customs regulations before ordering.

Payment Options

Solis BioDyne accepts payments by:

- Wire transfer, based on invoice
- PayPal, based on invoice or for orders placed through E-Shop
- Credit Card (VISA or Master Card) for orders placed through E-Shop

Cancellation and Return Policy

If you wish to cancel your order before it has been shipped please contact us and we will cancel it without any charge. In case the payment has been made, we will transfer the funds back to you (transfer charges will be deducted).

If the order has been sent out, you cannot return products without prior arrangements.

When the purchaser has submitted the order for the goods to the seller and the seller has accepted the order, the purchaser shall not have the right to return the goods that have been sent pursuant to the order and are compliant with the contract as the disposal period of the goods is limited and upon returning the goods, the seller would be unable to make sure whether the packaging of the goods has been opened by the purchaser or not. In case of problems with the performance of our products, please contact us and we will find the best solution together. If wrong product has been sent out by accident, we will replace the products without any charge.

Solis BioDyne

Riia 185a, 51014 Tartu, ESTONIA Tel.: +372 7409 960 Fax: +372 7402 079 E-mail: solis@sbd.ee Skype: solis.biodyne Web: www.sbd.ee

> VAT No: EE100587614 Reg. No: 10242922

Bank details:

Swedbank AS IBAN code: EE692200221005142234 SWIFT/BIC.: HABAEE2X Bank address: Liivalaia 8, 15040 Tallinn, Estonia

Distributors*

AFRICA



DELTA Trading & Development SAE Egypt Tel: +20 2 3573 6679 E-mail: ahmed@deltatd.com Web: www.deltatd.com



Separations South Africa Tel: +27 11 919 1000 E-mail: info@separations.co.za Web: www.separations.co.za

ASIA

Biogenuix Medsystems Pvt. Ltd. India Tel: +91 11 2561 2008 E-mail: contact@biogenuix.com Web: www.biogenuix.com



Bigenuix

PT. Sentra Biosains Dinamika Indonesia Tel: +62 21 4288 6574 E-mail: sentra@indo.net.id Web: www.sentrabd.com



Genomicbase Republic of Korea Tel: +82 2 2215 4926 E-mail: info@genomicbase.com Web: www.genomicbase.com



Next Gene Scientific Malaysia Tel: +603 5882 8650 E-mail: sales@nextgene.my Web: www.nextgene.my



Hongblue Life Science Trade Co. Taiwan Tel: +886 4 2263 1262 E-mail: hongblue@ms65.hinet.net Web: www.hongblue.url.tw



Kinetic Taiwan Tel: +886-2-2925-0929 E-mail: info@kineticbiotech.com.tw Web: www.kineticbiotech.com.tw



EUROPE

Medibena Austria Tel: +43 1 9906 497 E-mail: info@medibena.at Web: www.medibena.at



Cytogen Polska Sp. z o.o. Poland Tel: +48 42 6300 598 E-mail: cytogen@cytogen.com.pl Web: www.cytogen.com.pl

DAGMA, Lda.

DAGMA, Lda. Portugal Tel: +351 21 4573 222 E-mail: info@dagma.pt Web: www.dagma.pt



Ecoli s.r.o. Slovakia Tel: +421 0264 789 336 E-mail: ecoli@ecoli.sk Web: www.ecoli.sk



LucernaChem AG Switzerland Tel: +41 41 4209 636 E-mail: lucerna-chem@lucerna-chem.ch Web: www.lucerna-chem.ch



Newmarket Scientific United Kingdom Tel: +44 (0)1638 551500 E-mail: tech@nktscientific.com Web: www.newmarketscientific.com



BM LABORATUVAR SİSTEMLERİ

Bio-Connect B.V. The Netherlands Tel: +31 26 3264 450 E-mail: info@bio-connect.nl Web: www.bio-connect.nl

BM Yazılım Danıs. ve Laboratory Systems Ltd. Sti. Turkey Tel: +90 312 4472 280 E-mail: bm@bmlabosis.com Web: www.bmlabosis.com



Finland Tel: +358 20 741 31 70 Fax: +358 20 741 31 89 E-mail: labnet@labnet.fi



Baria Czech Republic Tel: +420 774 227 421 Fax: +420 244 911 2 28 E-mail: info@baria.cz Web: http://www.baria.cz



Euroclone S.P.A.

Italy Tel: +39 0238 1951 Fax: +39 0238 101 465 E-mail: info.bio@euroclone.it Web: http://www.euroclonegroup.it



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Genycell Biotech

Italy Tel: +39 0583 583 119 Fax: +39 0583 318 264 E-mail: marketing@aebprofessional.com Web: http://www.aebprofessional.com



Integrated Sciences Pty. Ltd.
Australia
Tel: +61 2 9417 7866
E-mail: tech@integratedsci.com.au
Web: www.integratedsci.com.au



dnature New Zealand Tel (toll-free): 0800 362 8873 E-mail: info@dnature.co.nz Web: www.dnature.co.nz

SOUTH AMERICA



Biocientifica S.A. Argentina Tel: (54-11) 4857-5005 E-mail: ventas@biocientifica.com.ar Web: www.biocientifica.com.ar



SAVE Import Export S.R.L. Bolivia Tel: (591)- 2213783 E-mail: laboratorio@saveimportexport.com Web: www.saveimportexport.com

LifeScience Company Spain Tel: +34 902 194353



TAG Copenhagen A/S Denmark Tel: +45 321 322 00 E-mail: oligo@tagc.com Web: http://www.tagc.dk/

MIDDLE EAST

Tel: +972 2 5667 043

BioConsult

Israel

E-mail: sales@genycell.com

Web: http://www.genycell.com/

Bio

E-mail: leurer@bioconsult.co.il Web: www.bioconsult.co.il



Pishgam Biotech Company Iran Tel: +98 21 8801 4393 E-mail: info@pishgambc.com Web: www.pishgambc.com



Cgenomi

Med Lab Services Pakistan Tel: +92 15 4419341 E-mail: mls@medlab.com.pk Web: www.medlab.com.pk

Al Genome Medical Company (Cgenomix) Jordan Tel: + 962 799 858 128 E-mail: m.andi@cgenomix.com Web: www.cgenomix.com

NORTH AMERICA

Mango Biotechnology LLC USA Tel: +1 650 5758 657 E-mail: cs@mangobio.com Web: www.mangobio.com

OCEANIA

Product List

qPCR Mixes

qi en mixes		
CAT. NO.	SIZE/ml	PRICE
5x HOT FIREPol® EvaGree 08-36-0000S	en® qPCR Supermix: 0.2	Free sample!
08-36-00001 08-36-00008	1 8	Please inquire! Please inquire!
08-36-00020	20	Please inquire!
5x HOT FIREPol [®] EvaGree		
08-24-0000S 08-24-00001	0.2	Free sample! Please inquire!
08-24-00020	20	Please inquire!
5x HOT FIREPol [®] EvaGree	en° qPCR Mix Plus (no RO)	X):
08-25-0000S	0.2	Free sample!
08-25-00001	1 20	Please inquire!
08-25-00020	20	Please inquire!
08-26-0000S	en [®] qPCR Mix Plus (Capilla 0.2	Free sample!
08-26-00001	1	Please inquire!
08-26-00020	20	Please inquire!
5x HOT FIREPol [®] EvaGree		
08-33-0000S 08-33-00001	0.2	Free sample! Please inquire!
08-33-00020	20	Please inquire!
5x HOT FIREPol [®] EvaGree	en [®] HRM Mix (no ROX):	
08-31-0000S	0.2	Free sample!
08-31-00001	1	Please inquire!
08-31-00020	20	Please inquire!
5x HOT FIREPol* Probe q 08-14-0000S	0.2	Free sample!
08-14-00001	1	Please inquire!
08-14-00020	20	Please inquire!
5x HOT FIREPol [®] Probe q		
08-15-0000S 08-15-00001	0.2	Free sample! Please inquire!
08-15-00020	20	Please inquire!
5x HOT FIREPol [®] Probe q		
08-16-0000S	0.2	Free sample!
08-16-00001	1	Please inquire!
08-16-00020	20	Please inquire!

PCR Mixes

NIO	

5x HOT FIREPol [®] Blend M Ready to Load with 7.5 m 04-25-00515 04-25-00115 04-25-02015	
5x HOT FIREPol [®] Blend M Ready to Load with 10 m 04-25-00520 04-25-00120 04-25-02020	
5x HOT FIREPol [®] Blend M Ready to Load with 12.5 04-25-00525 04-25-00125 04-25-02025	
5x HOT FIREPol [®] Blend M Ready to Load with 15 m 04-25-00S30 04-25-00130 04-25-02030	
5x FIREPol [®] Master Mix w 04-11-00S15 04-11-00115 5x FIREPol [®] Master Mix w 04-11-00S25	0.1 1
04-11-00125 5x FIREPol [®] Master Mix R 04-12-00515 04-12-00115	1 eady to Load with 7. 0.1 1
5x FIREPol [®] Master Mix R 04-12-00525 04-12-00125	eady to Load with 12 0.1 1

Free sample! Please inquire! Please inquire!

Free Sample! Please inquire!

Free Sample! Please inquire! 5 mM Mg Free Sample! Please inquire! 2.5 mM MgC Free Sample! Please inquire!

Taq DN	Taq DNA Polymerases			
CAT. NO.	SIZE/U	PRICE		
HOT FIREPol [®] DNA Polymerase (5 U/µl):				
01-02-0000S	100	Free sample!		
01-02-00500	500	Please inquire!		
01-02-01000	1000	Please inquire!		
FIREPol [®] DNA Polymerase (5 U/µl):				
01-01-0000S	100	Free Sample!		
01-01-00500	500	Please inquire!		
01-01-01000	1000	Please inquire!		
01-01-02000	2000	Please inquire!		

range and Blue:

Other PCR Reagents

CAT. NO.	SIZE
dNTP Set:	
02-21-0001S	4 x 0.5 μmol Free
02-21-00100	4 x 25 µmol
02-21-00400	4 x 100 µmol
dNTP Mix:	
02-31-00015	0.8 µmol
02-31-00020	20 µmol
02-31-00100	100 µmol
dUTP:	
02-41-0000S	2.5 µmol
02-41-00025	25 µmol
100 bp DNA Ladder	
07-11-0000S 07-11-00050	1.5 μg 50 μg
1 kb DNA Ladder Re 07-12-0000S	ady to Load: 1.5 μq
07-12-00005	1.5 μg 50 μg
6x DNA Loading Dye 07-01-0000S	0.1 ml
07-01-00001	1 ml
07-01-00010	10 ml
	e Buffer Double Blue:
07-02-0000S	0.1 ml
07-02-00001	1 ml
07-02-00010	10 ml
6x DNA Loading Dye	e Buffer Orange and E
07-03-0000S	0.1 ml
07-03-00001	1 ml
07-03-00010	10 ml
6x DNA Loading Dye	
07-04-0000S	0.1 ml
07-04-00001	1 ml
07-04-00010	10 ml
10x GC-rich Enhance	
05-16-00001 05-16-00010	0.1 ml 1.0 ml
05-16-00050	5 ml
05-16-00200	20 ml
25 mM MgCl _a :	
05-11-00012	1.2 ml
05-11-00050	5 ml
05-11-00200	20 ml
PCR Grade Water:	
water-025	25 ml
water-100	100 ml
water-500	500 ml

Other Enzymes

CAT. NO.	SIZE/U
TERMIPol [®] DNA Polymer	ase (5 U/µl):
01-03-0000S	500
01-03-00500	500
01-03-02000	2000
TERMIPol [®] DNA Polymer	ase HC (25 U/µl):
01-07-0000S	1000
01-07-01000	1000
01-07-05000	5000
HOT TERMIPol [®] DNA Poly	ymerase (5 U/μl):
01-06-0000S	500
01-06-00500	500
01-06-02000	2000
M-MLV Reverse Transcrip	otase RNase H Minus
06-21-00000S	2000
06-21-010000	10000
06-21-050000	50000

.5 µmol Free Sample! Please inquire! Please inquire!

Free Sample! Please inquire! Please inquire!

Free Sample! Please inquire!

Free Sample! Please inquire!

Free Sample! Please inquire!

Free Sample! Please inquire! Please inquire! Please inquire!

Please inquire! Please inquire! Please inquire!

Please inquire! Please inquire! Please inquire!

Free Sample!
Please inquire! Please inquire!



Please do not hesitate to contact us to enquire about the most convenient way to order in your region. (E-mail: solis@sbd.ee)