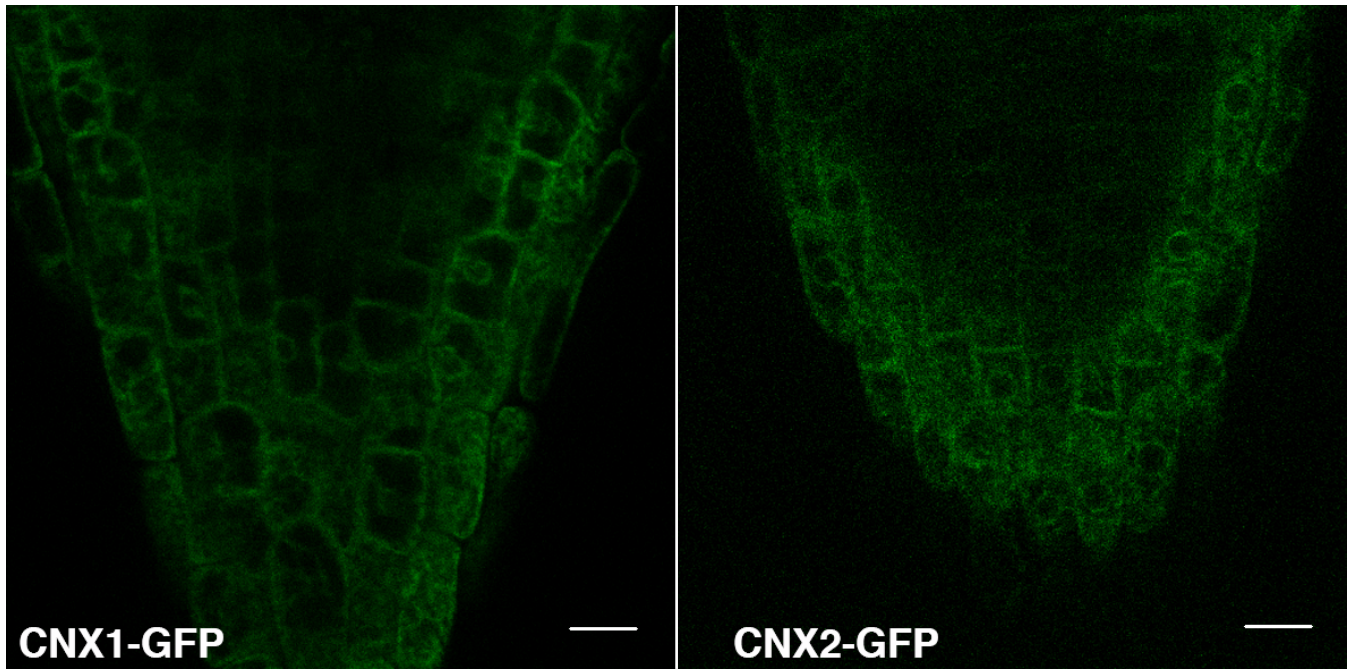


A**B**

GFP channel

RFP channel

Merge

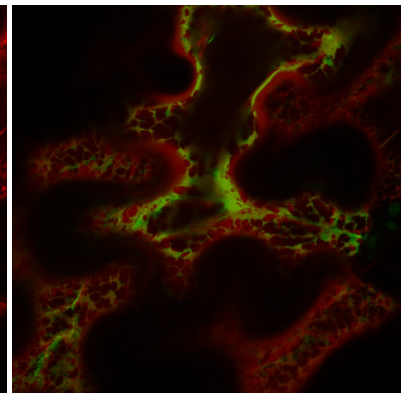
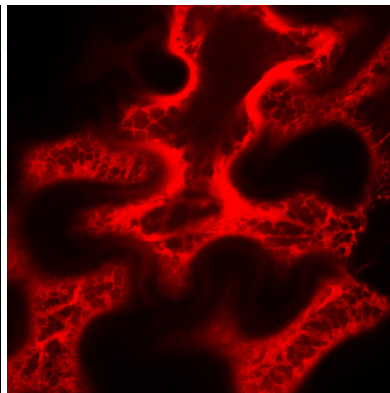
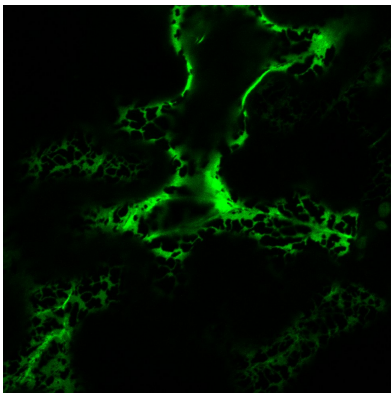
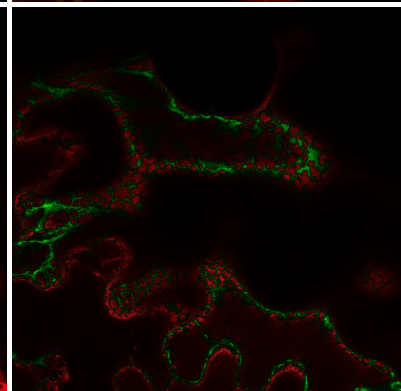
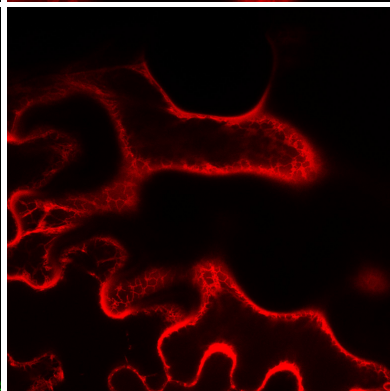
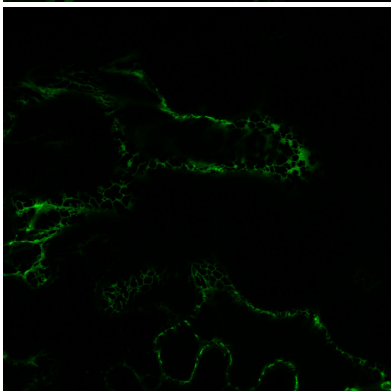
CNX1-GFP
ER-RFPCNX2-GFP
ER-RFP

Figure S1. Localization of *CNX1::CNX1-GFP* and *CNX2::CNX2-GFP* in the ER. (A) Expression of *CNX1::CNX1-GFP* and *CNX2::CNX2-GFP* in roots tips of transgenic *cnx1-1 cnx2-2* plants. Bars = 10 μ m. **(B)** Transient co-expression of *CaMV35S::CNX1-GFP* and *CaMV35S::CNX2-GFP* with the ER marker ER-RFP in tobacco leaves.

Supplemental Table S1. List of mutants used in this work

Mutant	Gene code	Source	Function	Source
<i>cnx1-1</i>	AT5G61790	SALK_083600	Calnexin 1	this work
<i>cnx2-2</i>	AT5G07340	SAIL_865_F08	Calnexin 2	this work
<i>cnx2-3</i>	AT5G07340	SAIL_580_F02	Calnexin 2	this work
<i>crt1-1 crt2-1</i>	AT1G56340, AT1G09210	SALK_142821 SALK_099778	Calreticulin 1, Calreticulin 2	this work
<i>crt3-1</i>	AT1G08450	SALK_051336	Calreticulin 3	this work
<i>alg3-1</i>	AT2G47760	SALK_064006	ER α -1,3-mannosyltransferase	Veit et al., Front Plant Sci 9, 1807 (2018)
<i>alg3a</i>	AT1G16900	GABI_831D07	ER α -1,2-mannosyltransferase	Veit et al., Front Plant Sci 9, 1807 (2018)
<i>alg10-1</i>	AT5gG02410	SAIL_515_F10	ER α -1,2-glucosyltransferase	Farid et al., Plant J 68, 314 (2011)
<i>stt3a-2</i>	AT5G19690	SALK_058814	Oligosaccharyl transferase	Koiwa et al., Plant Cell 15, 2273 (2003)
<i>mns4 mns5</i>	AT5G43710, AT1G25720	SALK_119093, GT_5_84786	ER-a-mannosidase-like	Hüttner et al., Plant Cell 26(4), 1712 (2014).
<i>ebs1-6/uggt1-1</i>	AT1G71220	WiscDsLox413-416K21	UDP-glucose:glycoprotein glucosyltransferase	Jin et al., Mol Cell 26, 821 (2007)
<i>psl4</i>	AT5g56360	SALK_074006	Beta-subunit of glucosidase II	this work
<i>bib1-4 bip3-1</i>	AT5G28540, AT1G09080	CS856879 SALK_024133	ER chaperone	Maruyama et al., Plant Cell Physiol 55, 801 (2014)
<i>bip2-1 bip3-1</i>	AT5G42020, AT1G09080	CS842467 SALK_024133	ER chaperone	Maruyama et al., Plant Cell Physiol 55, 801 (2014)
<i>sdj2-1</i>	AT2G25110	T-DNA activation-tagging	complex with ERdj3B-BiP ER chaperones	Nekrasov et al., EMBO J 28, 3428 (2009)
<i>pdr2</i>	AT5G23630	EMS mutant	P-type ATPase	Ticconi et al., Plant J 37, 801 (2004)
<i>lpr1-1</i>	AT1G23010	SALK_016297	Ferroxidase	Svistoonoff et al., Nature Genet 39, 792 (2007)
<i>lpr2-1</i>	AT1G71040	SALK_091930	Ferroxidase	Svistoonoff et al., Nature Genet 39, 792 (2007)
<i>lpr1-1 lpr2-1</i>	AT1G23010, AT1G71040	SALK_016297, SALK_091930	Ferroxidase	Svistoonoff et al., Nature Genet 39, 792 (2007)

Supplementary Table S2. Primer list

Gene ID	Gene name	Primer name	Sequence 5' - 3'
At5g61790	CNX1	qCNX1 Fw	CGCTGGATCGTTTCGAAGAA
		qCNX1 Rv	CACACTCAAGTCCTTCCTGGAA
At5g07340	CNX2	qCNX2 Fw2	AGTTCCTCCTTCTGTTCCG
		qCNX2 Rv2	AGGAATCAACGGAGGCTCAA
At2G38940	PHT1,4	qPHT1,4 Fw	TTGCTCCTAATTTTCTGATGCT
		qPHT1,4 Rv	TGTGCCGGCCGAAATCT
At2G11810	MGD3	MGD3 qPCR Fw	AGAGGCCGGTTTAATGGAG
		MGD3 qPCR Rv	CATCAGAGGATGCACGCTA
At1g42990	bZIP60	qbZIP60 Fw	CCGGCGGAGGATTTTCTTCA
		qbZIP60 Rv	GCCAAATCAACGGAGCCAGA