

Supplementary materials

Table S1. List of the primers used in the research.

Primer name	Sequence (5'-3')	Gene
<i>qRT-PCR</i>		
SaNRT2.1_F1	GTGCTTCTGTATGGATACTCT	SaNRT2.1
SaNRT2.1_R1	ATTCCAGCCGTGTGTAG	
SaNRT2.5_F2	TACTGGATGAGCTCCATGTT	SaNRT2.5
SaNRT2.5_R2	ACATTGTAGATTAGAGGCATCAC	
SaeEF1alfa_F1	TGAGATGTGTGGCAATCC	SaeEF1α
SaeEF1alfa_R1	GTTGCTTCTGACTCCAAGAAT	
<i>5'-RACE (round 1)</i>		
SaNRT2.1_R	GTAGCAGAACGCCACCCCTACGC	SaNRT2.1
SaNRT2.5_R	AATCCACCAGGTCCATATTCTCC	SaNRT2.5
<i>3'-RACE (round 1)</i>		
SaNRT2.1_F	CCTACGGTCTTTGCATGTCGTT	SaNRT2.1
SaNRT2.5_F	ATGAGGGCATTTCATCTATGTTGG	SaNRT2.5
<i>5'-RACE (round 2)</i>		
SaNRT2.1_R1	ATTCCAGCCGTGTGTAG	SaNRT2.1
SaNRT2.5_R2	ACATTGTAGATTAGAGGCATCAC	SaNRT2.5
<i>3'-RACE (round 2)</i>		
SaNRT2.1_F1	GTGCTTCTGTATGGATACTCT	SaNRT2.1
SaNRT2.5_F2	TACTGGATGAGCTCCATGTT	SaNRT2.5
<i>Amplification of full-length cDNA</i>		
SaNRT2.1b_F1	ATGGCTGGTGAGCCGG	SaNRT2.1
SaNRT2.1b_R	CTATATTGGTTAGAGTTGGGGCTTGTG	
SaNRT2.5a_F	ATGGCATCAACAAATGAAGAATTGC	SaNRT2.5
SaNRT2.5a_R1	TTAGACACGATTAACGTACTGCCT	
<i>Amplification of pYNRI</i>		
pYNR1_F	GGTCGACGGTATCGATAAGCTTATGGGGCTC CATATATCGTATGAC	SaNRT2.1
pYNR1-SaNRT2.1b-R1	CGGCTCACCAAGCCATGAATTCTACAACATAC CAAAGTTCGTGAGG	
pYNR1_F	GGTCGACGGTATCGATAAGCTTATGGGGCTC CATATATCGTATGAC	SaNRT2.5
pYNR1-SaNRT2.5a_R	CTTCATTGTTGATGCCATGAATTCTACAAC ATCCAAAGTTCGTGAGG	
<i>Amplification of tYNRI</i>		
tYNR1-SaNRT2.1b_F	CCCCAACTCTAACCAAATAGCTTAAGCCT AAGCGAAATCGAAATCAAAACT	SaNRT2.1
tYNR1_R	CCCGGGCTGCAGGAATTAAATTCA GAATCATGACCCC	
tYNR1_SaNRT2.5a_F1	AGTACAGTTAACGTGTCTAACGCTAGCCCTA AGCGAAATCGAAATCAAAACT	SaNRT2.5
tYNR1_R	CCCGGGCTGCAGGAATTAAATTCA GAATCATGACCCC	
<i>Screening of <i>H. polymorpha</i> transformants</i>		
Hp_DL-1_Chrl_R	TTGGTACCAACCGCACTTCTC	
M13_F	GTTGTAAAACGACGGCCAGTG	

Table S2. List of proteins from the phylogenetic tree of Figure 5a.

Plant species	Protein name	GenBank ID
<i>Arabidopsis thaliana</i>	AtNRT2.1	NP_172288.1
	AtNRT2.2	NP_172289.1
	AtNRT2.3	NP_200886.1
	AtNRT2.4	NP_200885.1
	AtNRT2.5	NP_172754.1
	AtNRT2.6	NP_190092.1
	AtNRT2.7	NP_196961.1
<i>Amaranthus tricolor</i>	AtrNRT2.1	XP_057535583.1
	AtrNRT2.5	XP_057530035.1
<i>Beta vulgaris</i>	BvNRT2.1	XP_010685329.1
	BvNRT2.4	XP_048504348.1
	BvNRT2.5	XP_010695818.2
<i>Brassica napus</i>	BnNRT2.6	XP_013677304.1
	BnNRT2.7	XP_013726185.2
<i>Brassica rapa</i>	BrNRT2.6	XP_009107824.2
	BrNRT2.7	XP_009125986.2
<i>Cannabis sativa</i>	CsaNRT2.5	XP_030496215.2
<i>Capsella rubella</i>	CrNRT2.5	XP_006307313.1
	CrNRT2.6	XP_006293136.1
	CrNRT2.7	XP_006286495.1
<i>Cucumis sativus</i>	CsNRT2.1	AZP53714.1
	CsNRT2.2	AGO64298.1
	CsNRT2.3	AGO64299.1
	CsNRT2.4	NP_001274401.1
	CsNRT2.5	NP_001295862.1
<i>Chenopodium quinoa</i>	CqNRT2.1	XP_021716511.1
	CqNRT2.5	XP_021713512.1
<i>Eutrema salsugineum</i>	EsNRT2.5	XP_006417172.1
	EsNRT2.6	XP_006419073.1
<i>Glycine max</i>	GmNRT2.4	XP_003539195.1
<i>Hordeum vulgare</i>	HvNRT2.1	AAC49531.1
	HvNRT2.2	AAC49532.1
	HvNRT2.4	KAE8777997.1
	HvNRT2.5	KAE8819762.1
<i>Medicago truncatula</i>	MtNRT2.1	XP_013455974.2
	MtNRT2.7	KEH30005.1
<i>Nicotiana sylvestris</i>	NsNRT2.7	XP_009757883.1
<i>Raphanus sativus</i>	RsNRT2.5	XP_018449553.1
<i>Solanum lycopersicum</i>	SINRT2.3	NP_001234127.1
	SINRT2.7	XP_004233327.2
<i>Spinacia oleracea</i>	SoNRT2.1	XP_021865042.1
	SoNRT2.5	XP_021845686.1
<i>Suaeda altissima</i>	SaNRT2.1	WPS65192.1
	SaNRT2.5	WPH61290.1
<i>Vigna angularis</i>	VaNRT2.1	XP_017409445.1