

Table S1. Abbreviated list of membrane transporters name/family

Abbreviation	Name/Family
HKT	High affinity K ⁺ transporter
LCT	Low-affinity transporter
CNGC	Nucleotide gated channel
GLR	Ionotropic glucose receptor channel
SOS1	Salt overly sensitive 1
NHX	Na ⁺ /H ⁺ antiporter
HAK	High affinity K ⁺ transporter
KT	K ⁺ transporters
KUP	K ⁺ uptake permease
AKT	Arabidopsis K ⁺ transporter
TPC	Two-pore channel
CHX	Cation/H ⁺ antiporter
KEA	K ⁺ efflux antiporter
OSCA	Mechanosensitive channel
ACA	Autoenriched Ca ²⁺ -ATPase
NCL	Ca ²⁺ /Na ⁺ exchange
VCX	Ca ²⁺ /H ⁺ exchange
CAX	Ca ²⁺ /H ⁺ exchange
HMA	Plasma membrane H ⁺ -ATPase
VMA	Vacuolar membrane H ⁺ -ATPase
SLAC	Slow anion channel
CLC	Chloride channel
ALMT	Aluminum-activated malate transporter
NTR	Nuclear transport receptor
MGT	Mg ²⁺ transporter
YSL2	Iron nicotianamine transporter yellow-stripe-like 2
MTP	Metal tolerance protein
VIT	Vacuole iron transporter
CDF	Cation diffusion facility transporter
IRT	Iron regulated transporter
NRAMP	Natural resistance-associated macrophage protein
ABC	ATP binding cassette transporter
MRP	Multidrug-associated protein
SUT	Sugar transporter
SWEET	Sugar will be exported transporter
ERD6	Early response to dehydration
STP	Sugar transporter protein
pGlcT	Plastic glucose transporter
INT	Inositol transporter
VGT	Vacuum glucose transporter
TST	Tonoplast sugar transporter

PLT	Polymer/monosacharide transporter
AAT	Amino acid transporter
APC	Amino acid polyamine choline transporter
AAAP	Amino acid/auxin permease
CAT	Cation amino acid transporter
PHS	Polyamine H ⁺ cotransporter
ACT	Amino acid/choline transporter
AAP	Amino acid permanence
LHT	Lysine/histidine transporter
ProT2	Proline transporter
ANT	Aromatic and neutral amino acid transporter
AUX	Putative auxin transporter
GAT	GABA transporter
GABP	GABA permease
MATE	Multidrug and toxic compound extrusion transporter
PUP	Purine uptake permease transporter
NRT	Nitrate-peptide transporter
