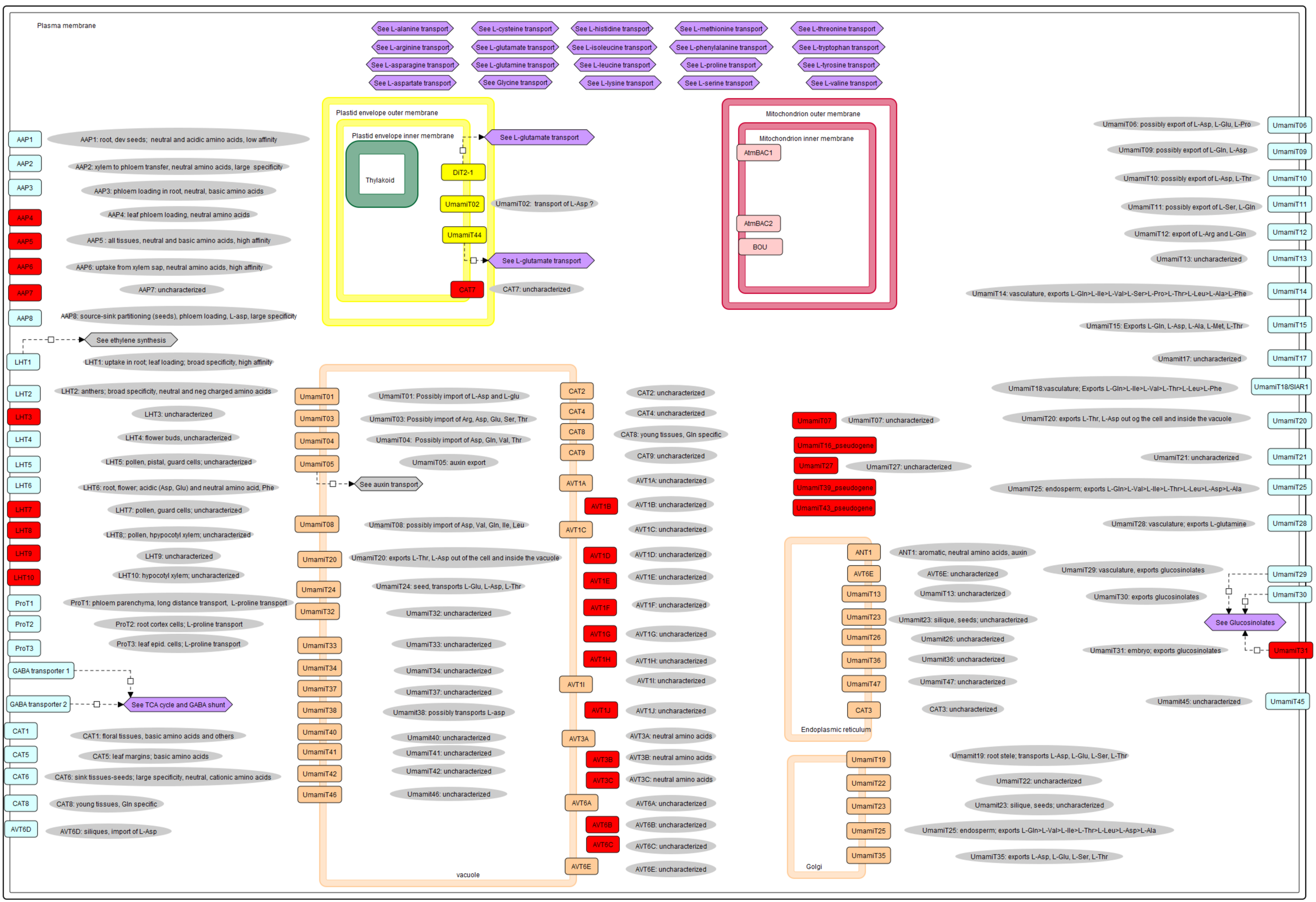
Plasma membrane
See L-alanine transport
See L-cysteine transport
See L-histidine transport
See L-methionine transport
See L-threonine transport
See L-arginine transport
See L-glutamate transport
See L-isoleucine transport
See L-phenylalanine transport
See L-tryptophan transport
See L-asparagine transport
See L-glutamine transport
See L-leucine transport
See L-proline transport
See L-tyrosine transport
See L-aspartate transport
See Glycine transport
See L-lysine transport
See L-serine transport
See L-valine transport
Plastid envelope outer membrane
Plastid envelope inner membrane
Thylakoid
See L-glutamate transport
DiT2-1
UmamiT02
UmamiT02: transport of L-Asp ?
UmamiT44
See L-glutamate transport
CAT7
CAT7: uncharacterized
Mitochondrion outer membrane
Mitochondrion inner membrane
AtmBAC1
AtmBAC2
BOU
AAP1
AAP1: root, dev seeds; neutral and acidic amino acids, low affinity
AAP2
AAP2: xylem to phloem transfer, neutral amino acids, large specificity
AAP3
AAP3: phloem loading in root, neutral, basic amino acids
AAP4
AAP4: leaf phloem loading, neutral amino acids
AAP5
AAP5 : all tissues, neutral and basic amino acids, high affinity
AAP6
AAP6: uptake from xylem sap, neutral amino acids, high affinity
AAP7
AAP7: uncharacterized
AAP8
AAP8: source-sink partitioning (seeds), phloem loading, L-asp, large specificity
See ethylene synthesis
LHT1
LHT1: uptake in root; leaf loading; broad specificity, high affinity
LHT2
LHT2: anthers; broad specificity, neutral and neg charged amino acids
LHT3
LHT3: uncharacterized
LHT4
LHT4: flower buds, uncharacterized
LHT5
LHT5: pollen, pistal, guard cells; uncharacterized
LHT6
LHT6: root, flower; acidic (Asp, Glu) and neutral amino acid, Phe
LHT7
LHT7: pollen, guard cells; uncharacterized
LHT8
LHT8;: pollen, hpypocotyl xylem; uncharacterized
LHT9
LHT9: uncharacterized
LHT10
LHT10: hypocotyl xylem; uncharacterized
ProT1
ProT1: phloem parenchyma, long distance transport, L-proline transport
ProT2
ProT2: root cortex cells; L-proline transport
ProT3
ProT3: leaf epid. cells; L-proline transport
GABA transporter 1
GABA transporter 2
See TCA cycle and GABA shunt
CAT1
CAT1: floral tissues, basic amino acids and others
CAT5
CAT5: leaf margins; basic amino acids
CAT6
CAT6: sink tissues-seeds; large specificity, neutral, cationic amino acids
CAT8
CAT8: young tissues, Gln specific
AVT6D
AVT6D: siliques, import of L-Asp
UmamiT01
UmamiT01: Possibly import of L-Asp and L-glu
UmamiT03
UmamiT03: Possibly import of Arg, Asp, Glu, Ser, Thr
UmamiT04
UmamiT04: Possibly import of Asp, Gln, Val, Thr
UmamiT05
UmamiT05: auxin export
See auxin transport
UmamiT08
UmamiT08: possibly import of Asp, Val, Gln, Ile, Leu
UmamiT20
UmamiT20: exports L-Thr, L-Asp out of the cell and inside the vacuole
UmamiT24
UmamiT24: seed, transports L-Glu, L-Asp, L-Thr
UmamiT32
UmamiT32: uncharacterized
UmamiT33
UmamiT33: uncharacterized
UmamiT34
UmamiT34: uncharacterized
UmamiT37
UmamiT37: uncharacterized
UmamiT38
Umamit38: possibly transports L-asp
UmamiT40
Umamit40: uncharacterized
UmamiT41
UmamiT41: uncharacterized
UmamiT42
UmamiT42: uncharacterized
UmamiT46
Umamit46: uncharacterized
vacuole
CAT2
CAT2: uncharacterized
CAT4
CAT4: uncharacterized
CAT8
CAT8: young tissues, Gln specific
CAT9
CAT9: uncharacterized
AVT1A
AVT1A: uncharacterized
AVT1B
AVT1B: uncharacterized
AVT1C
AVT1C: uncharacterized
AVT1D
AVT1D: uncharacterized
AVT1E
AVT1E: uncharacterized
AVT1F
AVT1F: uncharacterized
AVT1G
AVT1G: uncharacterized
AVT1H
AVT1H: uncharacterized
AVT1I
AVT1I: uncharacterized
AVT1J
AVT1J: uncharacterized
AVT3A
AVT3A: neutral amino acids
AVT3B
AVT3B: neutral amino acids
AVT3C
AVT3C: neutral amino acids
AVT6A
AVT6A: uncharacterized
AVT6B
AVT6B: uncharacterized
AVT6C
AVT6C: uncharacterized
AVT6E
AVT6E: uncharacterized
UmamiT07
UmamiT07: uncharacterized
UmamiT16_pseudogene
UmamiT27
UmamiT27: uncharacterized
UmamiT39_pseudogene
UmamiT43_pseudogene
ANT1
ANT1: aromatic, neutral amino acids, auxin
AVT6E
AVT6E: uncharacterized
UmamiT13
UmamiT13: uncharacterized
UmamiT23
Umamit23: silique, seeds; uncharacterized
UmamiT26
Umamit26: uncharacterized
UmamiT36
Umamit36: uncharacterized
UmamiT47
UmamiT47: uncharacterized
CAT3
CAT3: uncharacterized
Endoplasmic reticulum
UmamiT19
Umamit19: root stele; transports L-Asp, L-Glu, L-Ser, L-Thr
UmamiT22
UmamiT22: uncharacterized
UmamiT23
Umamit23: silique, seeds; uncharacterized
UmamiT25
UmamiT25: endosperm; exports L-Gln>L-Val>L-Ile>L-Thr>L-Leu>L-Asp>L-Ala
UmamiT35
UmamiT35: exports L-Asp, L-Glu, L-Ser, L-Thr
Golgi
UmamiT06
UmamiT06: possibly export of L-Asp, L-Glu, L-Pro
UmamiT09
UmamiT09: possibly export of L-Gln, L-Asp
UmamiT10
UmamiT10: possibly export of L-Asp, L-Thr
UmamiT11
UmamiT11: possibly export of L-Ser, L-Gln
UmamiT12
UmamiT12: export of L-Arg and L-Gln
UmamiT13
UmamiT13: uncharacterized
UmamiT14
UmamiT14: vasculature, exports L-Gln>L-Ile>L-Val>L-Ser>L-Pro>L-Thr>L-Leu>L-Ala>L-Phe
UmamiT15
UmamiT15: Exports L-Gln, L-Asp, L-Ala, L-Met, L-Thr
UmamiT17
Umamit17: uncharacterized
UmamiT18/SIAR1
UmamiT18:vasculature; Exports L-Gln>L-Ile>L-Val>L-Thr>L-Leu>L-Phe
UmamiT20
UmamiT20: exports L-Thr, L-Asp out og the cell and inside the vacuole
UmamiT21
UmamiT21: uncharacterized
UmamiT25
UmamiT25: endosperm; exports L-Gln>L-Val>L-Ile>L-Thr>L-Leu>L-Asp>L-Ala
UmamiT28
UmamiT28: vasculature; exports L-glutamine
UmamiT29
UmamiT29: vasculature, exports glucosinolates
UmamiT30
UmamiT30: exports glucosinolates
See Glucosinolates
UmamiT31
UmamiT31: embryo; exports glucosinolates
UmamiT45
Umamit45: uncharacterized