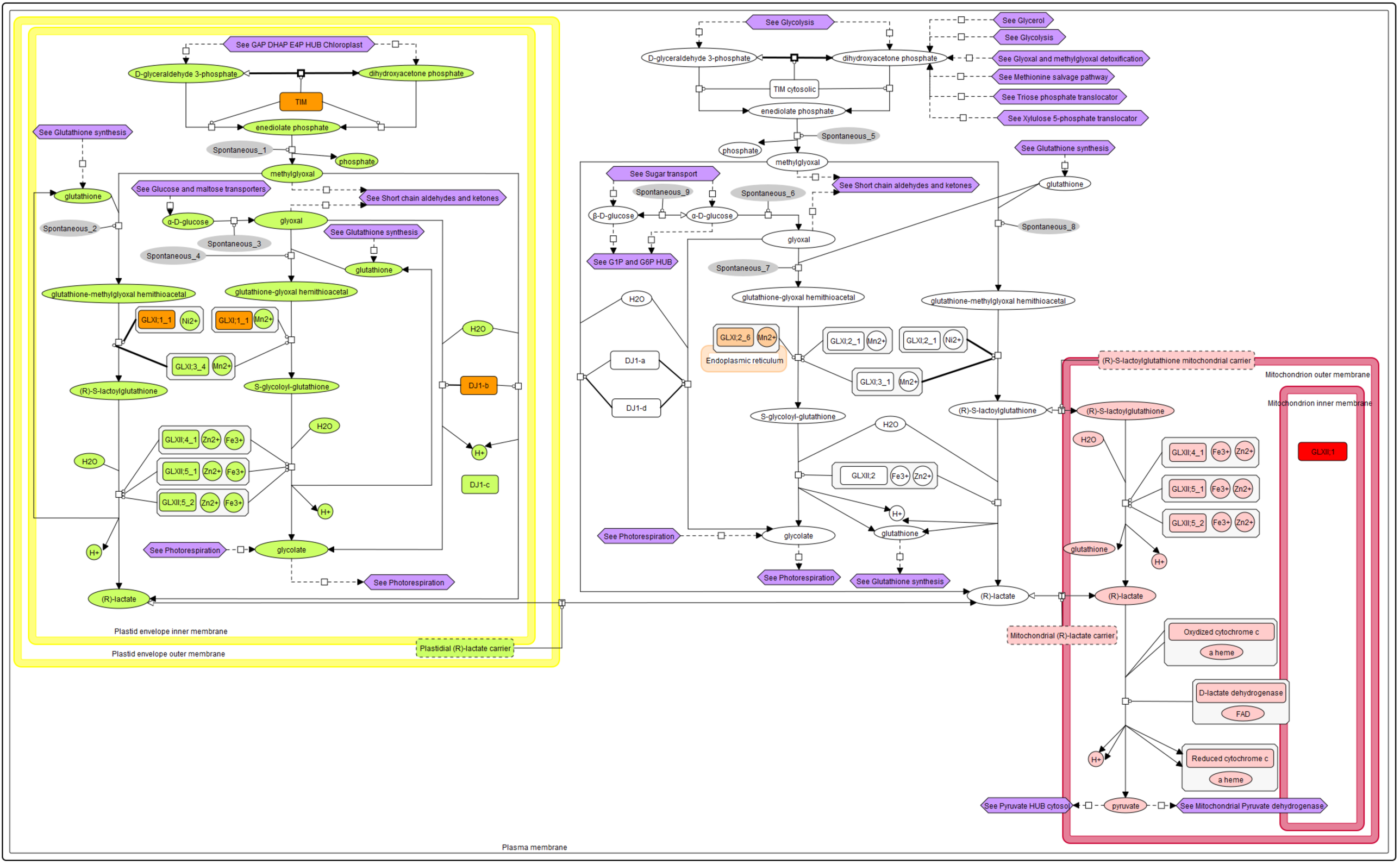
See GAP DHAP E4P HUB Chloroplast
D-glyceraldehyde 3-phosphate
dihydroxyacetone phosphate
TIM
enediolate phosphate
Spontaneous_1
phosphate
methylglyoxal
See Glutathione synthesis
glutathione
See Glucose and maltose transporters
See Short chain aldehydes and ketones
Spontaneous_2
α-D-glucose
glyoxal
Spontaneous_3
See Glutathione synthesis
Spontaneous_4
glutathione
glutathione-methylglyoxal hemithioacetal
glutathione-glyoxal hemithioacetal
GLXI;1_1
Ni2+
GLXI;1_1
Mn2+
GLXI;3_4
Mn2+
(R)-S-lactoylglutathione
S-glycoloyl-glutathione
H2O
DJ1-b
H2O
H+
GLXII;4_1
Zn2+
Fe3+
GLXII;5_1
Zn2+
Fe3+
GLXII;5_2
Zn2+
Fe3+
DJ1-c
H2O
H+
H+
See Photorespiration
glycolate
See Photorespiration
(R)-lactate
Plastid envelope inner membrane
Plastid envelope outer membrane
Plastidial (R)-lactate carrier
See Glycolysis
D-glyceraldehyde 3-phosphate
dihydroxyacetone phosphate
TIM cytosolic
enediolate phosphate
See Glycerol
See Glycolysis
See Glyoxal and methylglyoxal detoxification
See Methionine salvage pathway
See Triose phosphate translocator
See Xylulose 5-phosphate translocator
Spontaneous_5
phosphate
methylglyoxal
See Glutathione synthesis
glutathione
See Sugar transport
Spontaneous_9
Spontaneous_6
See Short chain aldehydes and ketones
β-D-glucose
α-D-glucose
Spontaneous_8
glyoxal
See G1P and G6P HUB
Spontaneous_7
glutathione-glyoxal hemithioacetal
glutathione-methylglyoxal hemithioacetal
H2O
GLXI;2_6
Mn2+
Endoplasmic reticulum
GLXI;2_1
Mn2+
GLXI;2_1
Ni2+
GLXI;3_1
Mn2+
DJ1-a
DJ1-d
S-glycoloyl-glutathione
H2O
(R)-S-lactoylglutathione
(R)-S-lactoylglutathione mitochondrial carrier
Mitochondrion outer membrane
Mitochondrion inner membrane
(R)-S-lactoylglutathione
H2O
GLXII;4_1
Fe3+
Zn2+
GLXII;1
GLXII;2
Fe3+
Zn2+
GLXII;5_1
Fe3+
Zn2+
GLXII;5_2
Fe3+
Zn2+
H+
H+
glutathione
See Photorespiration
glycolate
See Photorespiration
See Glutathione synthesis
(R)-lactate
(R)-lactate
Mitochondrial (R)-lactate carrier
Oxydized cytochrome c
a heme
D-lactate dehydrogenase
FAD
H+
Reduced cytochrome c
a heme
See Pyruvate HUB cytosol
pyruvate
See Mitochondrial Pyruvate dehydrogenase
Plasma membrane