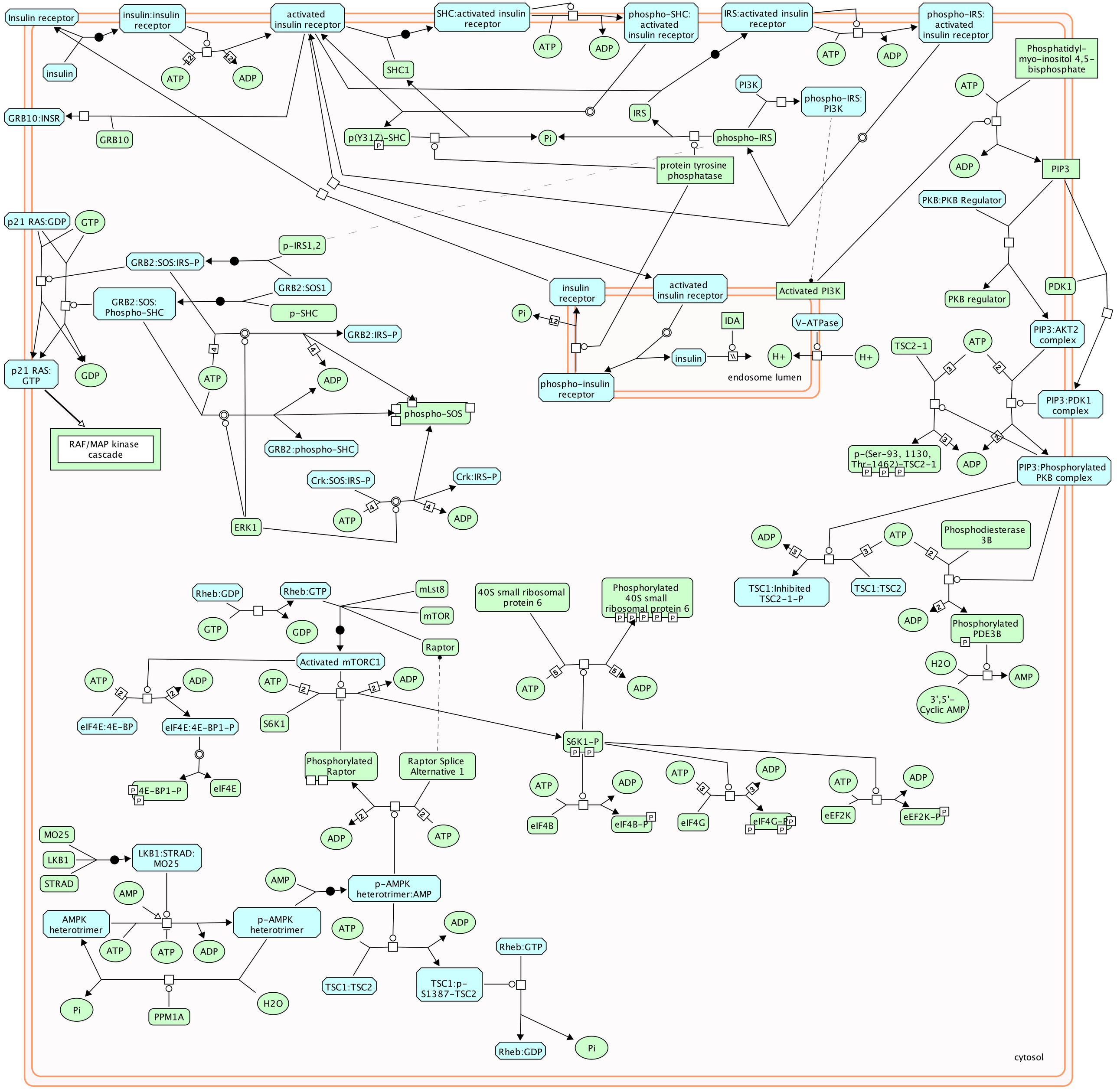
Insulin receptor
insulin:insulin receptor
activated insulin receptor
SHC:activated insulin receptor
phospho-SHC: activated insulin receptor
IRS:activated insulin receptor
phospho-IRS: activated insulin receptor
insulin
ATP
ADP
SHC1
GRB10:INSR
GRB10
p(Y317)-SHC
Pi
IRS
PI3K
phospho-IRS: PI3K
phospho-IRS
protein tyrosine phosphatase
Phosphatidyl-myo-inositol 4,5-bisphosphate
PIP3
PKB:PKB Regulator
PKB regulator
PDK1
PIP3:AKT2 complex
PIP3:PDK1 complex
PIP3:Phosphorylated PKB complex
p21 RAS:GDP
GTP
GDP
p21 RAS: GTP
RAF/MAP kinase cascade
p-IRS1,2
GRB2:SOS:IRS-P
GRB2:SOS1
GRB2:SOS: Phospho-SHC
p-SHC
GRB2:IRS-P
phospho-SOS
GRB2:phospho-SHC
Crk:SOS:IRS-P
Crk:IRS-P
ERK1
insulin receptor
activated insulin receptor
Activated PI3K
IDA
V-ATPase
H+
endosome lumen
phospho-insulin receptor
TSC2-1
p-(Ser-93, 1130, Thr-1462)-TSC2-1
Phosphodiesterase 3B
TSC1:Inhibited TSC2-1-P
TSC1:TSC2
Phosphorylated PDE3B
H2O
AMP
3',5'-Cyclic AMP
Rheb:GDP
Rheb:GTP
mLst8
mTOR
Raptor
Activated mTORC1
40S small ribosomal protein 6
Phosphorylated 40S small ribosomal protein 6
eIF4E:4E-BP
eIF4E:4E-BP1-P
S6K1
4E-BP1-P
eIF4E
Phosphorylated Raptor
Raptor Splice Alternative 1
S6K1-P
eIF4B
eIF4B-P
eIF4G
eIF4G-P
eEF2K
eEF2K-P
MO25
LKB1
STRAD
LKB1:STRAD: MO25
AMPK heterotrimer
p-AMPK heterotrimer
p-AMPK heterotrimer:AMP
PPM1A
TSC1:TSC2
TSC1:p-S1387-TSC2
cytosol