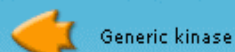


Enzymes

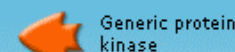


Generic Enzyme

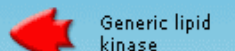
KINASE



Generic kinase



Generic protein kinase

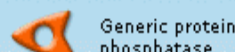


Generic lipid kinase

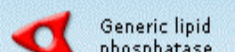
PHOSPHATASE



Generic phosphatase

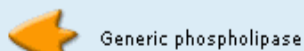


Generic protein phosphatase



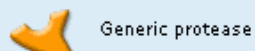
Generic lipid phosphatase

PHOSPHOLIPASE

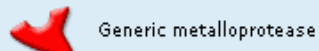


Generic phospholipase

PROTEASE

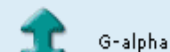


Generic protease

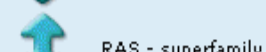


Generic metalloprotease

GTPase



G-alpha

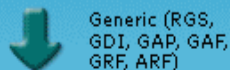


RAS - superfamily

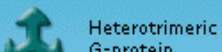
G protein Adaptor/regulators



G beta/gamma



Generic (RGS, GDI, GAP, GAF, GRF, ARF)

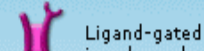


Heterotrimeric G-protein

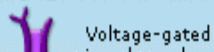
Channels/Transporters



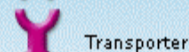
Generic channel



Ligand-gated ion channel

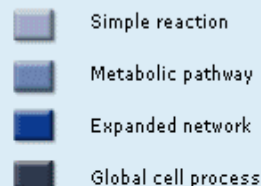


Voltage-gated ion channel



Transporter

Blocks



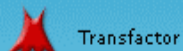
Arrows



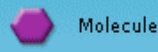
Generic classes



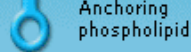
Protein



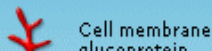
Transfactor



Molecule



Anchoring phospholipid



Cell membrane glycoprotein

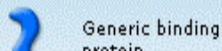


Inorganic ion

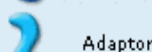


Receptor ligand

Adaptors/regulators



Generic binding protein

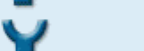


Adaptor

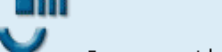
Receptors



Generic



GPCR



Receptors with kinase activity



Nuclear receptor

Localization



Mitochondria



EPR



Golgi



Nucleus



Lysosome



Peroxisome



Unspecified



Cytoplasm



Extracellular

Mechanisms

A Allosteric regulation

B Binding

C Cleavage

CM Covalent modifications

Cn Competition

Hy Hydrolysis

+P Phosphorylation

-P Dephosphorylation

Pr Protein processing stage

Ra Active center binding

Rr Reg center binding

T Transformation

Tn Translocation

X Exchange

Z Catalysis

Group of similar objects