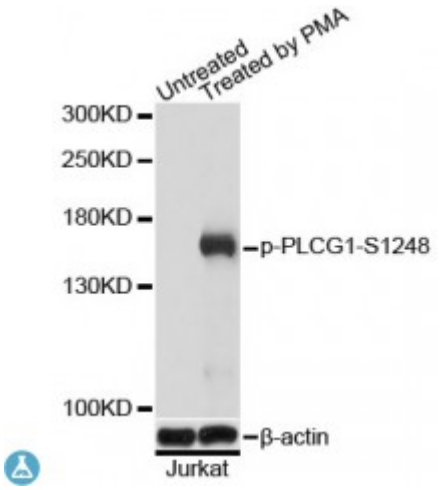
Anti-Phospho-PLCG1-(S1248) Antibody



Description	The protein encoded by this gene catalyzes the formation of inositol 1,4,5-trisphosphate and diacylglycerol from phosphatidylinositol 4,5-bisphosphate. This reaction uses calcium as a cofactor and plays an important role in the intracellular transduction of receptor-mediated tyrosine kinase activators. For example, when activated by SRC, the encoded protein causes the Ras guanine nucleotide exchange factor RasGRP1 to translocate to the Golgi, where it activates Ras. Also, this protein has been shown to be a major substrate for heparin-binding growth factor 1 (acidic fibroblast growth factor)-activated tyrosine kinase. Two transcript variants encoding different isoforms have been found for this gene.

Model	STJ117925
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	A synthetic phosphorylated peptide around S1248 of human PLCG1 (NP_002651.2).
Gene ID	5335
Gene Symbol	PLCG1
Dilution range	WB 1:500 - 1:2000
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-1

Molecular Weight	148.532 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:9065OMIM:172420Reactome:R-HSA-1169408
Alternative Names	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-1
Function	Mediates the production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3), Plays an important role in the regulation of intracellular signaling cascades, Becomes activated in response to ligand-mediated activation of receptor-type tyrosine kinases, such as PDGFRA, PDGFRB, FGFR1, FGFR2, FGFR3 and FGFR4, Plays a role in actin reorganization and cell migration,
Cellular Localization	Cell projection, lamellipodium, Cell projection, ruffle,
Post-translational Modifications	Tyrosine phosphorylated in response to signaling via activated FLT3, KIT and PDGFRA , Tyrosine phosphorylated by activated FGFR1, FGFR2, FGFR3 and FGFR4, Tyrosine phosphorylated by activated FLT1 and KDR, Tyrosine phosphorylated by activated PDGFRB, The receptor-mediated activation of PLCG1 involves its phosphorylation by tyrosine kinases, in response to ligation of a variety of growth factor receptors and immune system receptors, For instance, SYK phosphorylates and activates PLCG1 in response to ligation of the B-cell receptor, May be dephosphorylated by PTPRJ, Phosphorylated by ITK and TXK on Tyr-783 upon TCR activation in T-cells,