

Immunotag™ PLC γ1 (phospho Tyr1253) Polyclonal Antibody

Antibody Specification	
Catalog No.	ITP0315
Product Description	Immunotag™ PLC γ1 (phospho Tyr1253) Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PLC γ1 (Tyr1253)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized phospho-peptide around the phosphorylation site of human PLC γ1 (phospho Tyr1253)
Specificity	Phospho-PLC γ1 (Y1253) Polyclonal Antibody detects endogenous levels of PLC γ1 protein only when phosphorylated at Y1253.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	PLCG1
Accession No.	P19174 Q62077 P10686
Alternate Names	PLCG1; PLC1; 1-phosphatidylinositol 4; 5-bisphosphate phosphodiesterase gamma-1; PLC-148; Phosphoinositide phospholipase C-gamma-1; Phospholipase C-II; PLC-II; Phospholipase C-gamma-1; PLC-gamma-1

Antibody Specification

Description	phospholipase C gamma 1(PLCG1) Homo sapiens 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. [provided by RefSeq, Jul 2008],
Cell Pathway/ Category	Inositol phosphate metabolism,ErbB_HER,Calcium,Phosphatidylinositol signaling system,VEGF,Natural killer cell mediated cytotoxicity,T_Cell_Receptor,Fc epsilon RI,Fc gamma R-mediated phagocytosis,Leukocyte transendothelial migration,Neurotrophin,Vibrio cholerae infection,Epithelial cell signaling in Helicobacter pylori infection,Pathways in cancer,Glioma,Non-small cell lung cancer,
Protein Expression	Brain,Epithelium,Testis,Vein,
Subcellular Localization	ruffle,intracellular,cytoplasm,cytosol,plasma membrane,cell-cell junction,COP9 signalosome,lamellipodium,cell projection,
Protein Function	catalytic activity:1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate + H(2)O = 1D-myo-inositol 1,4,5-trisphosphate + diacylglycerol.,cofactor:Calcium.,domain:The SH3 domain mediates interaction with CLNK (By similarity). The SH3 domain also mediates interaction with RALGPS1.,function:PLC-gamma is a major substrate for heparin-binding growth factor 1 (acidic fibroblast growth factor)-activated tyrosine kinase.,PTM:The receptor-mediated activation of PLC-gamma-1 and PLC-gamma-2 involves their phosphorylation by tyrosine kinases in response to ligation of a variety of growth factor receptors and immune system receptors.,PTM:Ubiquitinated by CBLB in activated T-cells.,similarity:Contains 1 C2 domain.,similarity:Contains 1 EF-hand domain.,similarity:Contains 1 PH domain.,similarity:Contains 1 PI-PLC X-box domain.,similarity:Contains 1 PI-PLC Y-box domain.,similarity:Contains 1 SH3 domain.,similarity:Contains 2 PH domains.,similarity:Contains 2 SH2 domains.,similarity:Contains 3 PH domains.,subunit:Interacts with AGAP2 via its SH3 domain (By similarity). Interacts with phosphorylated LAT upon TCR activation. Interacts with the Pro-rich domain of TNK1 via its SH3 domain. Associates with BLNK, VAV1, GRB2 and NCK1 in a B-cell antigen receptor-dependent fashion. Interacts with CBLB in activated T-cells; which inhibits phosphorylation. Interacts with SHB. Interacts via its SH3 domain with the Arg/Gly-rich-flanked Pro-rich domains of KHDRBS1/SAM68. This interaction is selectively regulated by arginine methylation of KHDRBS1/SAM68. Interacts with INPP5D/SHIP1 and CLNK (By similarity). Interacts with RALGPS1. Interacts (via SH3 domain) with HEV ORF3 protein.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.