

Rabbit PLCG1 Polyclonal Antibody | anti-PLCG1 antibody

Phospho-PLCG1 (Ser1248) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329883	Rabbit	Human, Mouse, Rat, Monkey Predicted Reactivity: Pig (89%), Zebrafish (89%), Bovine (89%), Horse (89%), Sheep (89%), Rabbit (89%), Dog (89%)	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

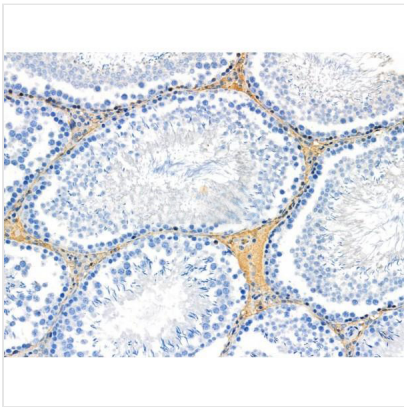
PLCG1; Polyclonal Antibody; Phospho-PLCG1 (Ser1248) Antibody; 1 phosphatidyl D myo inositol 4 5 bisphosphate; 1 phosphatidylinositol 4 5 bisphosphate phosphodiesterase gamma 1; 1-phosphatidylinositol-4; 5-bisphosphate phosphodiesterase gamma-1; Inositoltrisphosphohydrolase; Monophosphatidylinositol phosphodiesterase; NCKAP3; Phosphatidylinositol phospholipase C; Phosphoinositidase C; Phosphoinositide phospholipase C; Phosphoinositide phospholipase C-gamma-1; Phospholipase C 148; Phospholipase C gamma 1; Phospholipase C-gamma-1; Phospholipase C-II; PLC gamma 1; PLC II; PLC-148; PLC-gamma-1; PLC-II; PLC1; PLC148; Plcg1; PLCG1_HUMAN; PLCgamma1; anti-PLCG1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey Predicted Reactivity: Pig (89%), Zebrafish (89%), Bovine (89%), Horse (89%), Sheep (89%), Rabbit (89%), Dog (89%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-PLCG1 (Ser1248) Antibody detects endogenous levels of PLCG1 only when phosphorylated at Ser1248.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-PLCG1 antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PLCG1 around the phosphorylation site of Ser1248.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Tyrosine phosphorylated in response to signaling via activated FLT3, KIT and PDGFRA (By similarity). Tyrosine phosphorylated by activated FGFR1, FGFR2, FGFR3 and FGFR4. Tyrosine phosphorylated by activated FLT1 andKDR. 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. Ubiquitinated by CBLB in activated T-cells.

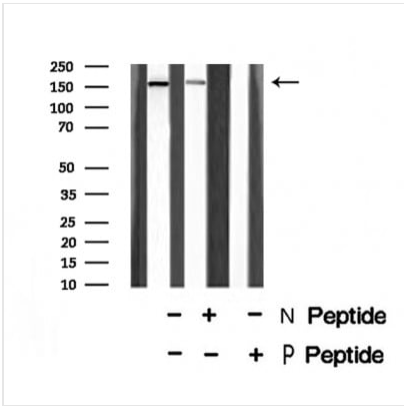
Subunit Structure	Interacts with AGAP2 via its SH3 domain. Interacts (via SH2 domain) with RET. Interacts with FLT1 (tyrosine-phosphorylated) (By similarity). Interacts (via SH2 domain) with FGFR1, FGFR2, FGFR3 and FGFR4 (phosphorylated). Interacts with LAT (phosphorylated) upon TCR activation. Interacts (via SH3 domain) with the Pro-rich domain of TNK1. 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 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, THEMIS and CLNK (By similarity). Interacts with AXL, FLT4 and KIT. Interacts with RALGPS1. Interacts (via the SH2 domains) with VIL1 (phosphorylated at C-terminus tyrosine phosphorylation sites). Interacts (via SH2 domain) with PDGFRA and PDGFRB (tyrosine phosphorylated). Interacts with PIP5K1C (By similarity). Interacts with NTRK1 and NTRK2 (phosphorylated upon ligand-binding). Interacts with SYK; activates PLCG1. Interacts with GRB2, LAT and THEMIS upon TCR activation in thymocytes (By similarity). Interacts with TESPA1; the association is increased with prolonged stimulation of the TCR and may facilitate the assembly of the LAT signalosome. (Microbial infection) Interacts (via SH3 domain) with HEV ORF3 protein.
Similarity	The SH3 domain mediates interaction with CLNK (By similarity). The SH3 domain also mediates interaction with RALGPS1.
Subcellular Location	Cell projection>Lamellipodium. Cell projection>Ruffle. Note: Rapidly redistributed to ruffles and lamellipodia structures in response to epidermal growth factor (EGF) treatment.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



Application Data
At 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.

IHC (Immunohiostchemistry)
Staining Rat testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of PLCG1 (Phospho-Ser1248) using EGF treated HepG2 whole cell lysates. -/+ means absence or presence of N peptide (non-phospho peptide) and P peptide (phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-PLCG1 antibody	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.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	33598948
NCBI GeneID	5335
NCBI Accession #	NP_002651.2
NCBI GenBank Nucleotide #	NM_002660.2
UniProt Accession #	P19174; Q2V575; B7ZLY7; B9EGH4; E1P5W4
Molecular Weight	148,532 Da
NCBI Official Full Name	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-1 isoform a
NCBI Official Synonym Full Names	phospholipase C, gamma 1
NCBI Official Symbol	PLCG1
NCBI Official Synonym Symbols	PLC1; NCKAP3; PLC-II; PLC148; PLCgamma1
NCBI Protein Information	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-1; PLC-148; PLC-gamma-1; phospholipase C-II; phospholipase C-148; phosphoinositidase C; phospholipase C-gamma-1; inositoltrisphosphohydrolase; phosphoinositide phospholipase C; phosphatidylin
UniProt Protein Name	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-1
UniProt Gene Name	PLCG1
UniProt Synonym Gene Names	PLC1; PLC-II; PLC-gamma-1
UniProt Entry Name	PLCG1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/plcg1-antibody-peptide-elisa-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/329883>