

Rabbit PLCG1 Polyclonal Antibody | anti-PLCG1 antibody

PLCG1 Antibody

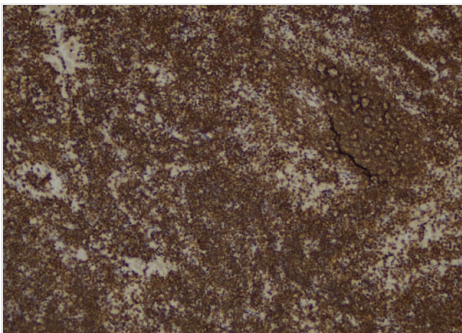
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA322255	Rabbit	Human, Mouse, Rat, Monkey	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

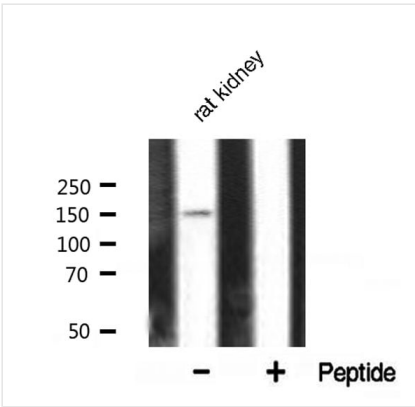
PLCG1; Polyclonal Antibody; PLCG1 Antibody; 1 phosphatidyl D myo inositol 4 5 bisphosphate; 1 phosphatidylinositol 4 5 bisphosphate phosphodiesterase gamma 1; 1-phosphatidylinositol-4; 5-bisphosphate phosphodiesterase gamma-1; Inositoltrisphosphohydrolase; Monophosphatidylinositol phosphodiesterase; 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

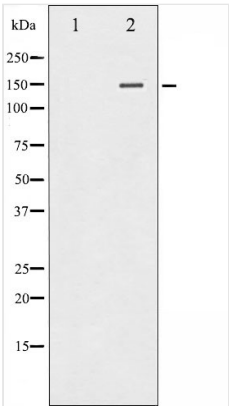
Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey
Clonality	Polyclonal
Isotype	IgG
Specificity	PLCG1 antibody detects endogenous levels of total PLCG1
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1291
Applicable Applications for anti-PLCG1 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PLCG1
Subcellular Location	Cell Projection > Lamellipodium. Cell Projection > Ruffle. Rapidly redistributed to ruffles and lamellipodia structures in response to epidermal growth factor (EGF) treatment.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Zebrafish (91%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (82%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



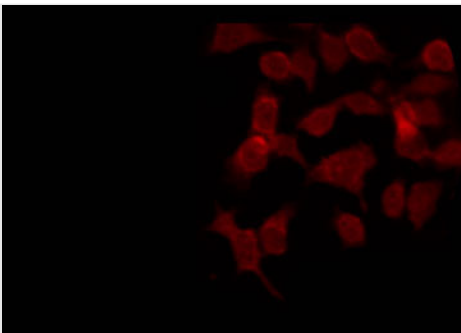
IHC (Immunohistochemistry)
AAA322255 at 1/100 staining Mouse spleen tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of PLCG1 expression in rat kidney tissue lysates, The lane on the right is treated with the antigen-specific peptide.



WB (Western Blot)
Western blot analysis of PLCG1 expression in EGF treated COS7 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)
AAA322255 staining COS7 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes 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.

ADDITIONAL INFORMATION

Related Product Information for anti-PLCG1 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. 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. 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 SH3 domain) with HEV ORF3 protein. 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. 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 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. Ubiquitinated by CBLB in activated T-cells. Similarity: The SH3 domain mediates interaction with CLNK (By similarity). The SH3 domain also mediates interaction with RALGPS1.
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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	Observed: 150 kDa Predicted: 149 kDa
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
UniProt Protein Name	1-phosphatidylinositol 4,5-bisphosphate phosphodiesterase gamma-1
UniProt Gene Name	PLCG1

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/plcg1-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/322255>