

Product datasheet for **TA327320**

PLCG 2 (PLCG2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, WB
Recommended Dilution:	WB 1:500 - 1:2000;IF 1:20- 1:100
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant protein of human PLCG2
Formulation:	Store at -20C or -80C. Avoid freeze / thaw cycles. Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	phospholipase C gamma 2
Database Link:	NP_002652 Entrez Gene 234779 Mouse Entrez Gene 5336 Human P16885



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Background:

Phosphoinositide-specific phospholipase C (PLC) plays a significant role in transmembrane signaling. In response to extracellular stimuli such as hormones, growth factors and neurotransmitters, PLC hydrolyzes phosphatidylinositol 4,5-bisphosphate (PIP₂) to generate two secondary messengers: inositol 1,4,5-triphosphate (IP₃) and diacylglycerol (DAG). At least four families of PLCs have been identified: PLC β , PLC γ , PLC δ and PLC ϵ . The PLC β subfamily includes four members, PLC β 1-4. All four members of the subfamily are activated by α - or β - γ -subunits of the heterotrimeric G-proteins. Phosphorylation is one of the key mechanisms that regulates the activity of PLC. Phosphorylation of Ser1105 by PKA or PKC inhibits PLC β 3 activity. Ser537 of PLC β 3 is phosphorylated by CaMKII, and this phosphorylation may contribute to the basal activity of PLC β 3. PLC γ is activated by both receptor and nonreceptor tyrosine kinases. PLC γ forms a complex with EGF and PDGF receptors, which leads to the phosphorylation of PLC γ at Tyr771, 783 and 1245. Phosphorylation by Syk at Tyr783 activates the enzymatic activity of PLC γ 1. PLC γ 2 is engaged in antigen-dependent signaling in B cells and collagen-dependent signaling in platelets. Phosphorylation by Btk or Lck at Tyr753, 759, 1197 and 1217 is correlated with PLC γ 2 activity.

Synonyms:

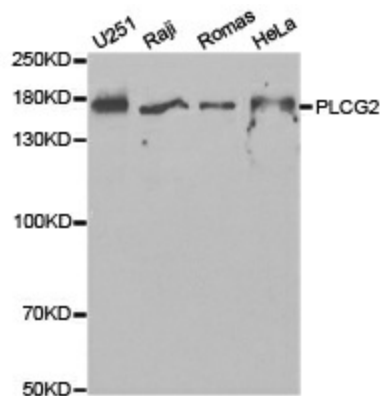
APLAID; FCAS3; PLC-gamma-2; PLC-IV

Protein Families:

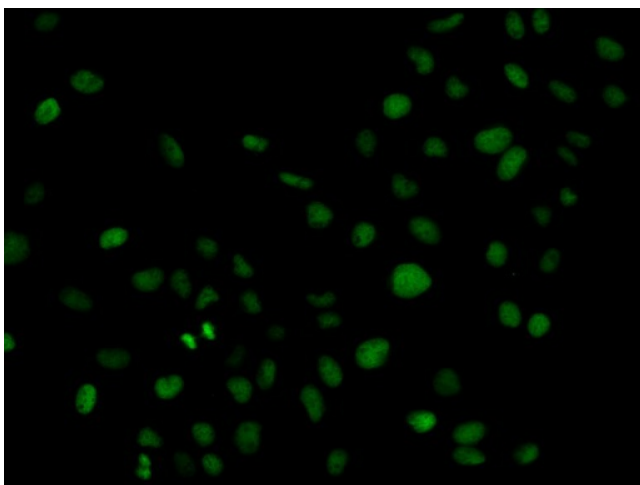
Druggable Genome

Protein Pathways:

B cell receptor signaling pathway, Calcium signaling pathway, Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Glioma, Inositol phosphate metabolism, Leukocyte transendothelial migration, Metabolic pathways, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pathways in cancer, Phosphatidylinositol signaling system, VEGF signaling pathway, Vibrio cholerae infection

Product images:

Western blot analysis of extracts of various cell lines, using PLCG2 antibody.



Immunofluorescence analysis of HeLa cell using PLCG2 antibody.