

Product datasheet

info@arigobio.com

ARG41204 anti-PLC gamma 1 phospho (Ser1248) antibody

Package: 50 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes PLC gamma 1 phospho (Ser1248)

Tested Reactivity Hu, Ms, Rat
Tested Application IHC-P, WB
Host Rabbit
Clonality Polyclonal

Isotype IgG

Target Name PLC gamma 1

Species Human

Immunogen Phosphospecific peptide around Ser1248 of Human PLC gamma 1 (NP_002651.2).

Conjugation Un-conjugated

Alternate Names PLC-gamma-1; Phospholipase C-gamma-1; PLC148; 1-phosphatidylinositol 4,5-bisphosphate

phosphodiesterase gamma-1; Phosphoinositide phospholipase C-gamma-1; NCKAP3; PLC-148;

Phospholipase C-II; PLC1; PLCgamma1; PLC-II; EC 3.1.4.11

Application Instructions

Application	Dilution
IHC-P	1:50 - 1:200
WB	1:500 - 1:2000
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Jurkat + PMA	
~ 150 kDa	
	* The dilutions indicate recomm should be determined by the sci

Properties

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol PLCG1

Gene Full Name phospholipase C, gamma 1

Background 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]

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. [UniProt]

Calculated Mw 149 kDa

PTM 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.

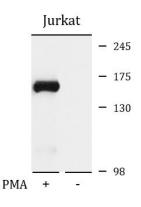
Phosphorylated by ITK and TXK on Tyr-783 upon TCR activation in T-cells.

Ubiquitinated by CBLB in activated T-cells. [UniProt]

Cellular Localization Cell projection, lamellipodium. Cell projection, ruffle. Note=Rapidly redistributed to ruffles and

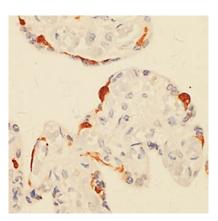
lamellipodia structures in response to epidermal growth factor (EGF) treatment. [UniProt]

Images



ARG41204 anti-PLC gamma 1 phospho (Ser1248) antibody WB image

Western blot: Jurkat cells were treated by PMA/TPA (200 nM) at 37° C for 10 minutes or untreated. 25 µg of cell lysate stained with ARG41204 anti-PLC gamma 1 phospho (Ser1248) antibody.



ARG41204 anti-PLC gamma 1 phospho (Ser1248) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta tissue stained with ARG41204 anti-PLC gamma 1 phospho (Ser1248) antibody at 1:100 dilution.