ARG23702
anti-PLC gamma 1 antibody [M156]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [M156] recognizes PLC gamma 1
Tested Reactivity	Hu
Tested Application	ELISA, ICC/IF, IP, WB
Host	Mouse
Clonality	Monoclonal
Clone	M156
Isotype	IgG1
Target Name	PLC gamma 1
Species	Human
Immunogen	Synthetic peptide around the N-terminal region of Human PLC gamma1. This sequence is highly conserved in Rat and Mouse PLC gamma1, and has low homology to PLC gamma2.
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 table

Application	Dilution
ELISA	1:2000
ICC/IF	1:100
IP	1:100
WB	1:1000

Application Note: WB: Antibody is suggested to be diluted in 5% skimmed milk/Tris buffer with 0.04% Tween20 and incubated for 1 hour at room temperature.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

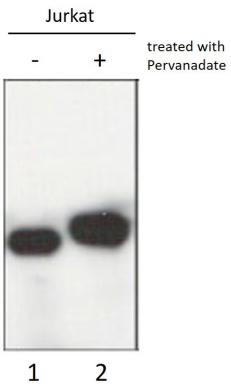
Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.05% Sodium azide, 50% Glycerol and 1 mg/ml BSA.
Preservative	0.05% Sodium azide
Stabilizer	50% Glycerol and 1 mg/ml BSA

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.
Note	For laboratory research only, not for drug, diagnostic or other 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]

Images



ARG23702 anti-PLC gamma 1 antibody [M156] WB image

Western blot: Analysis of PLC gamma1 immunoprecipitates from Jurkat cells untreated (lane 1) or treated with pervanadate (1 mM) for 30 min (lane 2). Immunoprecipitation and Western blot was performed with ARG23702 anti-PLC gamma 1 antibody [M156].