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PLCG2 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2064a

Product Information

Application	WB, IHC, E
Primary Accession	P16885
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1E10C11
Isotype	IgG1
Calculated MW	147870
Description	The protein encoded by this gene is a transmembrane signaling enzyme that catalyzes the conversion of 1-phosphatidyl-1D-myo-inositol 4,5-bisphosphate to 1D-myo-inositol 1,4,5-trisphosphate (IP3) and diacylglycerol (DAG) using calcium as a cofactor. IP3 and DAG are second messenger molecules important for transmitting signals from growth factor receptors and immune system receptors across the cell membrane. Mutations in this gene have been found in autoinflammation, antibody deficiency, and immune dysregulation syndrome and familial cold autoinflammatory syndrome 3.
Immunogen	Purified recombinant fragment of human PLCG2 (AA: 826-985) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	5336
Other Names	1-phosphatidylinositol 4, 5-bisphosphate phosphodiesterase gamma-2, 3.1.4.11, Phosphoinositide phospholipase C-gamma-2, Phospholipase C-IV, PLC-IV, Phospholipase C-gamma-2, PLC-gamma-2, PLCG2
Dilution	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PLCG2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLCG2 (HGNC:9066)
Function	The production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) is mediated by activated phosphatidylinositol-specific phospholipase C enzymes (PubMed:19394299, PubMed:23000145). It is a crucial enzyme in transmembrane signaling (PubMed:23000145).
Cellular Location	Membrane raft {ECO:0000250|UniProtKB:Q8CIH5}.

References

1.J Biol Chem. 2005 Nov 25;280(47):38923-31.2.World J Gastroenterol. 2003 Nov;9(11):2413-8.

Images

