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PLCB1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9374b

Product Information

Application	WB, FC, E
Primary Accession	Q9NQ66
Other Accession	Q9Z1B3, P10894
Reactivity	Human
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17391
Calculated MW	138567
Antigen Region	1148-1176

Additional Information

Gene ID	23236
Other Names	1-phosphatidylinositol 4, 5-bisphosphate phosphodiesterase beta-1, PLC-154, Phosphoinositide phospholipase C-beta-1, Phospholipase C-I, PLC-I, Phospholipase C-beta-1, PLC-beta-1, PLCB1, KIAA0581
Target/Specificity	This PLCB1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1148-1176 amino acids from the C-terminal region of human PLCB1.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PLCB1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLCB1 (HGNC:15917)
Synonyms	KIAA0581

Function	Catalyzes the hydrolysis of 1-phosphatidylinositol 4,5- bisphosphate into diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) and mediates intracellular signaling downstream of G protein- coupled receptors (PubMed:9188725). Regulates the function of the endothelial barrier.
Cellular Location	Nucleus membrane {ECO:0000250|UniProtKB:Q9Z1B3}. Cytoplasm {ECO:0000250|UniProtKB:P10687}. Note=Colocalizes with the adrenergic receptors, ADREN1A and ADREN1B, at the nuclear membrane of cardiac myocytes. {ECO:0000250|UniProtKB:Q9Z1B3}

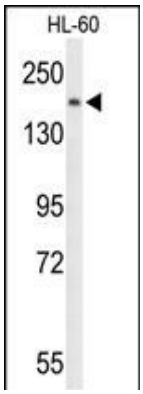
Background

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 many extracellular signals. This gene is activated by two G-protein alpha subunits, alpha-q and alpha-11.

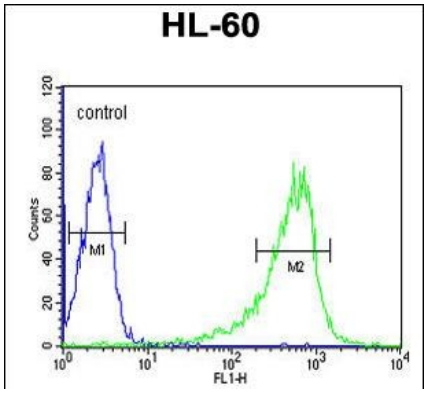
References

Need, A.C., et al. Hum. Mol. Genet. 18(23):4650-4661(2009)
Woodcock, E.A., et al. J. Mol. Cell. Cardiol. 47(5):676-683(2009)
Zhang, Y., et al. J. Recept. Signal Transduct. Res. 29(1):52-62(2009)

Images



Western blot analysis of PLCB1 Antibody (C-term) (Cat. #AP9374b) in HL-60 cell line lysates (35ug/lane). PLCB1 (arrow) was detected using the purified Pab.



PLCB1 Antibody (C-term) (Cat. #AP9374b) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.