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PLCB3 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22155a

Product Information

Application	WB, E
Primary Accession	Q01970
Other Accession	P51432, Q99JE6
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat, Canine
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB56188
Calculated MW	138799

Additional Information

Gene ID	5331
Other Names	1-phosphatidylinositol 4, 5-bisphosphate phosphodiesterase beta-3, 3.1.4.11, Phosphoinositide phospholipase C-beta-3, Phospholipase C-beta-3, PLC-beta-3, PLCB3
Target/Specificity	This PLCB3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 16-50 amino acids from human PLCB3.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	PLCB3 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLCB3 {ECO:0000303|PubMed:20966218, ECO:0000312|EMBL:AAA77683.1}
Function	Catalyzes the production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) (PubMed:20966218, PubMed:29122926, PubMed:37172014, PubMed:37991948,

PubMed:9188725). Key transducer of G protein-coupled receptor signaling: activated by G(q)/G(11) G alpha proteins downstream of G protein-coupled receptors activation (PubMed:20966218, PubMed:37991948). In neutrophils, participates in a phospholipase C- activating N-formyl peptide-activated GPCR (G protein-coupled receptor) signaling pathway by promoting RASGRP4 activation by DAG, to promote neutrophil functional responses (By similarity). In conjunction with OSBPL2, it may contribute to the control of keratinocyte proliferation and differentiation, probably through the regulation of the ERK pathway and the cell cycle (PubMed:38701954).

Cellular Location

Cytoplasm. Membrane; Peripheral membrane protein; Cytoplasmic side. Nucleus {ECO:0000250|UniProtKB:P51432} Note=An heterotetramer composed of GNG2 and GNB1 increases the concentration of PLCB3 on the membrane surface, where its substrate PIP2 resides, by orienting its catalytic site

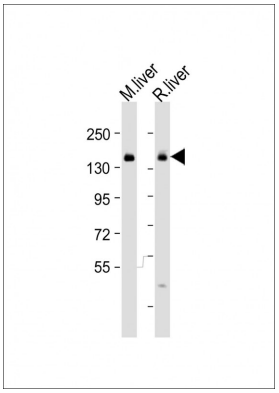
Background

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.

References

Mazuruk K.,et al.Biochem. Biophys. Res. Commun. 212:190-195(1995).
Lagercrantz J.,et al.Genomics 26:467-472(1995).
Taylor T.D.,et al.Nature 440:497-500(2006).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Carozzi A.J.,et al.Eur. J. Biochem. 210:521-529(1992).

Images



All lanes : Anti-PLCB3 Antibody (N-Term) at 1:2000 dilution Lane 1: mouse liver lysate Lane 2: rat liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 139 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.