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PLC β3 Polyclonal Antibody

Catalog # AP71973

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q01970
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	138799

Additional Information

Gene ID	5331
Other Names	PLCB3; 1-phosphatidylinositol 4; 5-bisphosphate phosphodiesterase beta-3; Phosphoinositide phospholipase C-beta-3; Phospholipase C-beta-3; PLC-beta-3
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/5000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

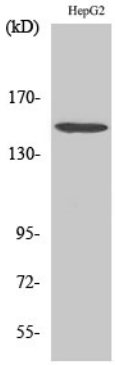
Name	PLCB3 {ECO:0000303|PubMed:20966218, ECO:0000312|EMBL:AAA77683.1}
Function	Catalyzes the production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) (PubMed:20966218, PubMed:29122926, PubMed:37172014, PubMed:37991948, PubMed:9188725). Key transducer of 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.

Images



Western Blot analysis of various cells using PLC β3 Polyclonal Antibody

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