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Phospho-PLCB3 (S537) Antibody

Rabbit mAb
Catalog # AP93267

Product Information

Application	WB
Primary Accession	Q01970
Reactivity	Human
Clonality	Monoclonal
Other Names	Plcb3;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	138799

Additional Information

Dilution	WB 1:500~1:2000
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Phospho-PLCB3 (S537)
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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

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