10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-Phospho-PLCB3 (S537) Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1667

Product Information

Application	WB
Primary Accession	Q01970
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	24GB1260
Calculated MW	138799
Gene Name	PLCB3
Aliases	Phospholipase C Beta 3; 1-Phosphatidylinositol 4,5-Bisphosphate Phosphodiesterase Beta-3; Phospholipase C, Beta 3 (Phosphatidylinositol-Specific); Phosphoinositide Phospholipase C-Beta-3; EC 3.1.4.11; Phospholipase C-Beta-3; PLC Beta 3; PLC-Beta-3; SMDCD
Immunogen	A synthesized peptide derived from human Phospho-PLCB3 (S537)

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 {ECO:0000303|PubMed:20966218, ECO:0000312|EMBL:AAA77683.1}

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

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