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Anti-PLC beta 3 Antibody

Rabbit polyclonal antibody to PLC beta 3
Catalog # AP61288

Product Information

Application	WB, IF/IC, IHC
Primary Accession	Q01970
Other Accession	P51432
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	138799

Additional Information

Gene ID	5331
Other Names	1-phosphatidylinositol 45-bisphosphate phosphodiesterase beta-3; Phosphoinositide phospholipase C-beta-3; Phospholipase C-beta-3; PLC-beta-3
Target/Specificity	Recognizes endogenous levels of PLC beta 3 protein.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/50 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~WB (1/500 - 1/1000), IHC (1/50 - 1/200), IF/IC (1/100 - 1/500)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

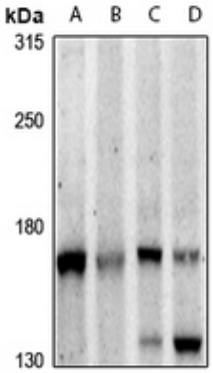
Name	PLCB3 {ECO:0000303|PubMed:20966218, ECO:0000312|EMBL:AAA77683.1}
Function	Catalyzes the production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) (PubMed:20966218, PubMed:29122926, PubMed:37991948, PubMed:9188725). Key transducer of G protein-coupled 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).
Cellular Location	Cytoplasm. Membrane {ECO:0000250|UniProtKB:Q99JE6}. Nucleus {ECO:0000250|UniProtKB:P51432} Note=And particulate fractions.

{ECO:0000250|UniProtKB:Q99JE6}

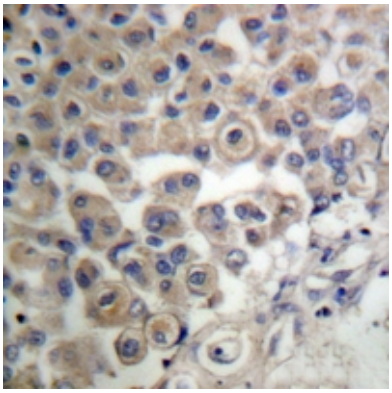
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PLC beta 3. The exact sequence is proprietary.

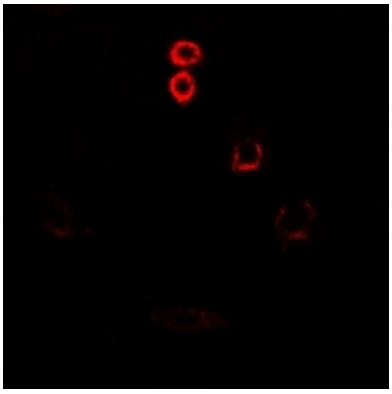
Images



Western blot analysis of PLC beta 3 expression in HCT116 (A), Beas2B (B), PMVEC (C), CT26 (D) whole cell lysates.



Immunohistochemical analysis of PLC beta 3 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of PLC beta 3 staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a Alexa Fluor 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Citations

- Morphine- and foot shock-responsive neuronal ensembles in the VTA possess different connectivity and biased GPCR signaling pathway