

Product datasheet for AP20327PU-N

OriGene Technologies, Inc.

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Phospholipase C beta 3 (PLCB3) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IF, IHC

Recommended Dilution: Immunohistochemistry on paraffin sections: 1/50-1/200.

Immunofluorescence: 1/50-1/200.

Reactivity: Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

Specificity: This antibody detects endogenous levels of PLC β3 protein.

Formulation: Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2

State: Aff - Purified

State: Liquid purified Ig fraction

Concentration: 1.0 mg/ml

Purification: Affinity-chromatography using epitope-specific immunogen; purity is > 95% (by SDS-PAGE)

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: ~ 150 kDa

Gene Name: phospholipase C beta 3

Database Link: Entrez Gene 18797 MouseEntrez Gene 29322 RatEntrez Gene 5331 Human

Q01970



Background:

Phosphoinositide-specific phospholipase C (PLC) plays a critical role in the initiation of receptor mediated signal transduction through the generation of the two second messengers, inositol 1, 4, 5-triphosphate and diacylglycerol from phosphatidylinositol 4, 5 bisphosphate. A total of eight mammalian PLC isozymes have been described (PLC β 1, PLC β 2, PLC β 3, PLC β 4, PLC γ 1, PLC γ 2, PLC δ 1 and PLC δ 2) with molecular weights ranging from 85 to 150 kDa. The γ -type enzymes are unique in that they contain SH2 and SH3 domains. Moreover, the two γ -type enzymes, but not the β and δ isozymes, are subject to activation by a number of protein tyrosine kinases which associate with their SH2 domains and induce their activation by phosphoryation. In contrast, activation of PLC β 1, PLC β 2 and PLC β 3 is mediated by the α subunits of the Gq class of heterotrimeric G proteins and by certain $\beta\gamma$ G protein subunits. The regulatory mechanisms for PLC δ 1 and PLC δ 2 are as yet not resolved.

Synonyms: PLC-beta-3, Phospholipase C-beta-3

Protein Families: Druggable Genome

Protein Pathways: Alzheimer's disease, Calcium signaling pathway, Chemokine signaling pathway, Gap junction,

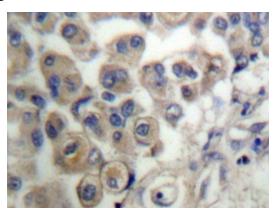
GnRH signaling pathway, Huntington's disease, Inositol phosphate metabolism, Long-term

depression, Long-term potentiation, Melanogenesis, Metabolic pathways,

Phosphatidylinositol signaling system, Vascular smooth muscle contraction, Wnt signaling

pathway

Product images:



Immunohistochemistry analyzes of PLC $\beta 3$ antibody (Cat.-No.: AP20327PU-N) in paraffinembedded human breast carcinoma tissue.