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Product datasheet for AP20281PU-M

Phospholipase C beta 3 (PLCB3) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	**Western blot:** 1/500-1/1000. **Immunohistochemistry on paraffin sections:** 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

View online »

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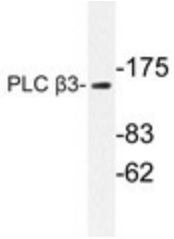
Background: Phosphoinositide-specific phospholipase C (PLC) plays a critical role in the initiation of receptor mediated signal transduction through the generation of the two second messengers, inositol 1, 4, 5-triphosphate and diacylglycerol from phosphatidylinositol 4, 5 bisphosphate. A total of eight mammalian PLC isozymes have been described (PLC β1, PLC β2, PLC β3, PLC β4, PLC γ1, PLC γ2, PLC δ1 and PLC δ2) 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 β1, PLC β2 and PLC β3 is mediated by the α subunits of the Gq class of heterotrimeric G proteins and by certain βγ G protein subunits. The regulatory mechanisms for PLC δ1 and PLC δ2 are as yet not resolved.

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

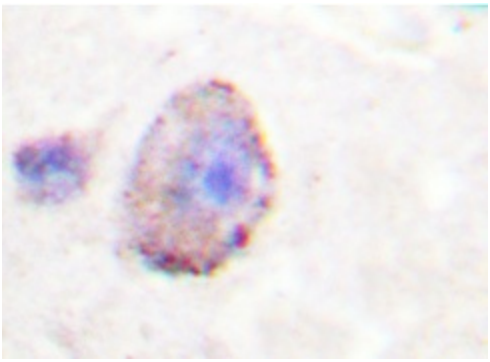
Protein Families: Druggable Genome

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:



Western blot analysis of PLC β3 antibody ([AP20281PU-N]) in extracts from HeLa cells.



Immunohistochemistry analyzes of PLC β3 antibody ([AP20281PU-N]) in paraffin-embedded human brain tissue.

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