

Product datasheet for **AP20281PU-N**

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 β 3 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 Mouse Entrez Gene 29322 Rat Entrez Gene 5331 Human Q01970



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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 biphosphate. 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 phosphorylation. 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:

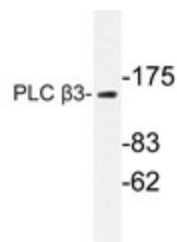
PLC-beta-3, Phospholipase C-beta-3

Protein Families:

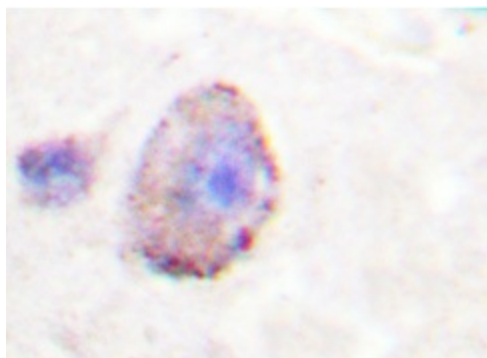
Druggable Genome

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:

Western blot analysis of PLC β 3 antibody (AP20281PU-N) in extracts from HeLa cells.



Immunohistochemistry analyzes of PLC β 3 antibody (AP20281PU-N) in paraffin-embedded human brain tissue.