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

# PPAP2B Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21245a

## Product Information

| | |
|---|---|
| **Application** | WB, E |
| **Primary Accession** | O14495 |
| **Reactivity** | Human, Rat, Mouse |
| **Predicted** | Bovine, Canine, Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB52645 |
| **Calculated MW** | 35116 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 8613 |
| **Other Names** | Lipid phosphate phosphohydrolase 3, PAP2-beta, Phosphatidate phosphohydrolase type 2b, Phosphatidic acid phosphatase 2b, PAP-2b, PAP2b, Vascular endothelial growth factor and type I collagen-inducible protein, VCIP, PPAP2B, LPP3 |
| **Target/Specificity** | This PPAP2B antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 3~37 amino acids from the N-terminal region of human PPAP2B. |
| **Dilution** | WB~~1:2000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | PPAP2B Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

| | |
|---|---|
| **Name** | PLPP3 ( HGNC:9229) |
| **Synonyms** | LPP3, PPAP2B |

| | |
|---|---|
| **Function** | Magnesium-independent phospholipid phosphatase of the plasma membrane that catalyzes the dephosphorylation of a variety of glycerolipid and sphingolipid phosphate esters including phosphatidate/PA, lysophosphatidate/LPA, diacylglycerol pyrophosphate/DGPP, sphingosine 1-phosphate/S1P and ceramide 1- phosphate/C1P (PubMed:27694435, PubMed:9607309, PubMed:9705349). Also acts on N-oleoyl ethanolamine phosphate/N-(9Z-octadecenoyl)- ethanolamine phosphate, a potential physiological compound (PubMed:9607309). Has both an extracellular and an intracellular phosphatase activity, allowing the hydrolysis and the cellular uptake of these bioactive lipid mediators from the milieu, regulating signal transduction in different cellular processes (PubMed:23591818, PubMed:27694435, PubMed:9607309). Through the dephosphorylation of extracellular sphingosine-1-phosphate and the regulation of its extra- and intracellular availability, plays a role in vascular homeostasis, regulating endothelial cell migration, adhesion, survival, proliferation and the production of pro-inflammatory cytokines (PubMed:27694435). By maintaining the appropriate levels of this lipid in the cerebellum, also ensure its proper development and function (By similarity). Through its intracellular lipid phosphatase activity may act in early compartments of the secretory pathway, regulating the formation of Golgi to endoplasmic reticulum retrograde transport carriers (PubMed:23591818). |
| **Cellular Location** | Cell membrane; Multi-pass membrane protein {ECO:0000250\|UniProtKB:P97544}. Basolateral cell membrane; Multi-pass membrane protein {ECO:0000250\|UniProtKB:P97544}. Endoplasmic reticulum membrane; Multi-pass membrane protein {ECO:0000250\|UniProtKB:P97544}. Endoplasmic reticulum-Golgi intermediate compartment membrane; Multi-pass membrane protein {ECO:0000250\|UniProtKB:P97544}. Golgi apparatus membrane; Multi-pass membrane protein {ECO:0000250\|UniProtKB:P97544}. Golgi apparatus, trans-Golgi network membrane; Multi-pass membrane protein {ECO:0000250\|UniProtKB:P97544}. Membrane raft; Multi-pass membrane protein {ECO:0000250\|UniProtKB:P97544}. Note=Cycles between the endoplasmic reticulum and the Golgi. |
| **Tissue Location** | Ubiquitously expressed (PubMed:12660161, PubMed:9305923). Highly expressed in heart and placenta (PubMed:9305923). |

## Background

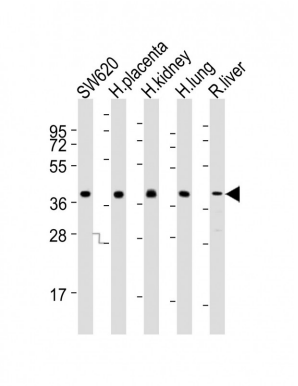
Catalyzes the conversion of phosphatidic acid (PA) to diacylglycerol (DG). In addition it hydrolyzes lysophosphatidic acid (LPA), ceramide-1-phosphate (C-1-P) and sphingosine-1- phosphate (S-1-P). The relative catalytic efficiency is LPA = PA > C-1-P > S-1-P. May be involved in cell adhesion and in cell-cell interactions.

## References


Kai M.,et al.J. Biol. Chem. 272:24572-24578(1997).
Roberts R.,et al.J. Biol. Chem. 273:22059-22067(1998).
Humtsoe J.O.,et al.EMBO J. 22:1539-1554(2003).
Leung D.W.,et al.Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
Yu W.,et al.Genome Res. 7:353-358(1997).


## Images

All lanes : Anti-PPAP2B Antibody (N-term) at 1:2000




dilution Lane 1: SW620 whole cell lysates Lane 2: human placenta lysates Lane 3: human kidney lysates Lane 4: human lung lysates Lane 5: rat liver lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 35 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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