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PPAP2B Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21245a

Product Information

Application	WB, E
Primary Accession	O14495
Reactivity	Human, Rat, Mouse
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

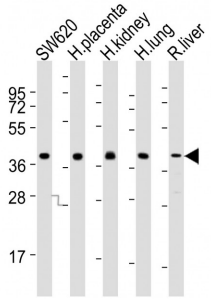
Catalyzes the conversion of phosphatidic acid (PA) to diacylglycerol (DG). In addition it hydrolyzes lysophosphatidic acid (LPA), ceramide-1-phosphate (C-1-P) and sphingosine-1- phosphate (S-1-P). The relative catalytic efficiency is LPA = PA > C-1-P > S-1-P. May be involved in cell adhesion and in cell-cell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