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PPAPDC1B Antibody

Catalog # ASC11027

Product Information

Application	WB, E
Primary Accession	Q8NEB5
Other Accession	NP_001096029, 156523237
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	29484
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PPAPDC1B antibody can be used for detection of PPAPDC1B by Western blot at 1 - 2 □g/mL.

Additional Information

Gene ID	84513
Other Names	Phosphatidate phosphatase PPAPDC1B, 3.1.3.4, Phosphatidic acid phosphatase type 2 domain-containing protein 1B, PPAPDC1B, DPPL1, HTPAP
Target/Specificity	PPAPDC1B;
Reconstitution & Storage	PPAPDC1B antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	PPAPDC1B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLPP5 (HGNC:25026)
Function	Magnesium-independent phospholipid phosphatase with broad substrate specificity (PubMed:17590538). Preferentially catalyzes the conversion of diacylglycerol pyrophosphate into phosphatidate but can also act on phosphatidate and lysophosphatidate (PubMed:17590538). Phospholipid phosphatases are involved in both the synthesis of lipids and the generation or degradation of lipid-signaling molecules (PubMed:17590538).
Cellular Location	Cell membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q3UMZ3}

Tissue Location Ubiquitous..

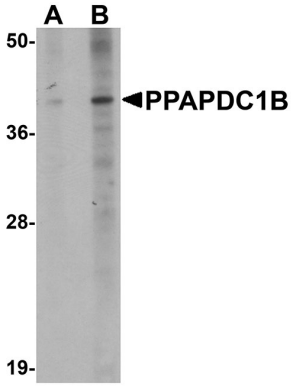
Background

PPAPDC1B Antibody: Phosphatidate phosphatase (PAP) plays important role in lipid-signaling metabolism in eukaryotic cells. Two distinct types of PAP (PAP1 and PAP2) activity have been distinguished by their subcellular localization and differential sensitivity to N-ethylmaleimide (NEM) and Mg2+. A yeast diacylglycerol pyrophosphate (DGPP) phosphatase (DPP1) and mammalian DGPP phosphatase (PAP2) have been identified as Mg2+-independent and NEM-insensitive membrane-associated. PPAPDC1A (also known as DPPL2) and PPAPDC1B (DPPL1) form a novel type of Mg2+-independent and NEM-sensitive mammalian phosphatidate phosphatase showing broad substrate specificity. Knockdown experiments indicated that this protein is involved with multiple cell signaling pathways, including the JAK-Stat3, MAP kinase, and PKC pathways. PPAPDC1B may also potentiate the estrogen receptor pathway by down-regulating DUSP22.

References

Takeuchi M, Harigai M, Momohara S, et al. Cloning and characterization of DPPL1 and DPPL2, representatives of a novel type of mammalian phosphatidate phosphatase. Gene2007; 399:174-80.
Bernard-Pierrot I, Gruel N, Stransky N, et al. Characterization of the recurrent 8p11-12 amplicon identifies PPAPDC1B, a phosphatase protein, as a new therapeutic target in breast cancer. Cancer Res.2008; 68:7165-75.

Images



Western blot analysis of PPAPDC1B in EL4 cell lysate with PPAPDC1B antibody at (A) 1 and (B) 2 µg/mL.