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PPAPDC1A Antibody
Catalog # ASC11026

Specification

PPAPDC1A Antibody - Product Information

Application	**WB, IF**
Primary Accession	Q5VZY2
Other Accession	NP_001025230, 73611920
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**PPAPDC1A antibody can be used for detection of PPAPDC1A by Western blot at 1 µg/mL. For immunofluorescence start at 20 µg/mL.**

PPAPDC1A Antibody - Additional Information

Gene ID	**196051**

Target/Specificity
PPAPDC1A;

Reconstitution & Storage
PPAPDC1A 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
PPAPDC1A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PPAPDC1A Antibody - Protein Information

Name PLPP4 (HGNC:23531)

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 degradation or generation of lipid-signaling molecules like diacylglycerol (PubMed:28851360).

Cellular Location
Membrane; Multi- pass membrane protein

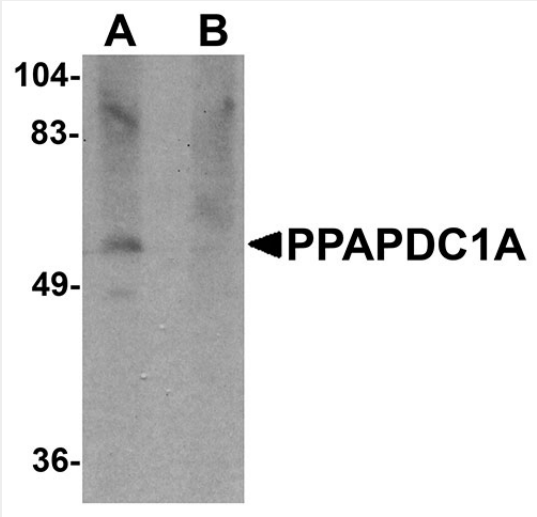
Tissue Location
Expressed mainly to the brain, kidney and testis, and to a lesser extent the bone marrow, thymus, prostate, liver and uterus.

PPAPDC1A Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PPAPDC1A Antibody - Images



Western blot analysis of PPAPDC1A in human brain tissue lysate with PPAPDC1A antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide.

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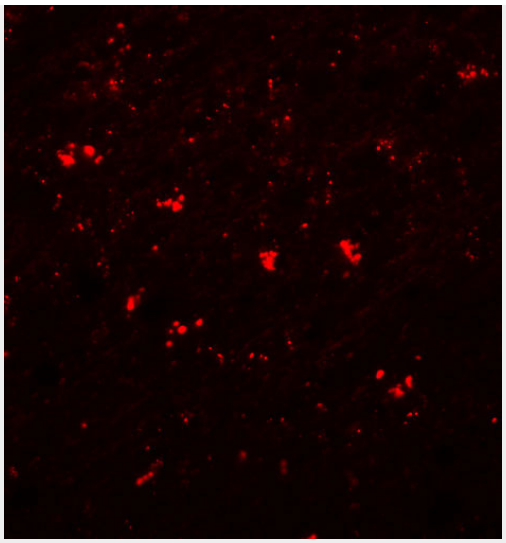

Immunofluorescence of PPAPDC1A in human brain tissue with PPAPDC1A antibody at 20 µg/mL.

PPAPDC1A Antibody - Background

PPAPDC1A 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. PPAPDC1A is preferentially expressed in endothelial cells. Studies of PPAPDC1A and PAP activity suggest that they may play a role in angiogenesis.

PPAPDC1A Antibody - 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.