

## **PPAPDC2 Antibody (N-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17641A

## **Specification**

# PPAPDC2 Antibody (N-term) - Product Information

**Application** WB,E **Primary Accession 081Y26** NP 982278.3 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 32194 Antigen Region 70-96

## PPAPDC2 Antibody (N-term) - Additional Information

#### Gene ID 403313

### **Other Names**

Presqualene diphosphate phosphatase, 313-, Phosphatidic acid phosphatase type 2 domain-containing protein 2, PPAP2 domain-containing protein 2, PPAPDC2

## Target/Specificity

This PPAPDC2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 70-96 amino acids from the N-terminal region of human PPAPDC2.

## **Dilution**

WB~~1:1000

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**

PPAPDC2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# PPAPDC2 Antibody (N-term) - Protein Information

Name PLPP6 (HGNC:23682)



**Function** Magnesium-independent polyisoprenoid diphosphatase that catalyzes the sequential dephosphorylation of presqualene, farnesyl, geranyl and geranylgeranyl diphosphates (PubMed:16464866, PubMed:19220020, PubMed:20110354). Functions in the innate immune response through the dephosphorylation of presqualene diphosphate which acts as a potent inhibitor of the signaling pathways contributing to polymorphonuclear neutrophils activation (PubMed:16464866, PubMed:23568778). May regulate the biosynthesis of cholesterol and related sterols by dephosphorylating presqualene and farnesyl diphosphate, two key intermediates in this biosynthetic pathway (PubMed:20110354). May also play a role in protein prenylation by acting on farnesyl diphosphate and its derivative geranylgeranyl diphosphate, two precursors for the addition of isoprenoid anchors to membrane proteins (PubMed:20110354). Has a lower activity towards phosphatidic acid (PA), but through phosphatidic acid dephosphorylation may participate in the biosynthesis of phospholipids and triacylglycerols (PubMed:18930839). May also act on ceramide-1-P, lysophosphatidic acid (LPA) and sphing-4-enine 1-phosphate/sphingosine-1-phosphate (PubMed:18930839, PubMed:20110354).

### **Cellular Location**

Endoplasmic reticulum membrane; Multi-pass membrane protein. Nucleus envelope. Nucleus inner membrane

#### **Tissue Location**

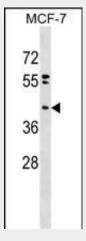
Widely expressed. Expressed in most organs, in particular gastrointestinal organs, spleen, placenta, kidney, thymus and brain.

## PPAPDC2 Antibody (N-term) - 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

# PPAPDC2 Antibody (N-term) - Images



PPAPDC2 Antibody (N-term) (Cat. #AP17641a) western blot analysis in MCF-7 cell line lysates (35ug/lane). This demonstrates the PPAPDC2 antibody detected the PPAPDC2 protein (arrow).



# PPAPDC2 Antibody (N-term) - Background

Phosphatase that dephosphorylates presqualene diphosphate (PSDP) into presqualene monophosphate (PSMP), suggesting that it may be indirectly involved in innate immunity. PSDP is a bioactive lipid that rapidly remodels to presqualene monophosphate PSMP upon cell activation. Displays diphosphate phosphatase activity with a substrate preference for PSDP > FDP > phosphatidic acid.

## PPAPDC2 Antibody (N-term) - References

Miriyala, S., et al. J. Biol. Chem. 285(18):13918-13929(2010) Carlo, T., et al. Biochemistry 48(13):2997-3004(2009) Olsen, J.V., et al. Cell 127(3):635-648(2006) Olsen, J.V., et al. Cell 127(3):635-648(2006) Fukunaga, K., et al. J. Biol. Chem. 281(14):9490-9497(2006)