

PPAPDC2 Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS13793**Specification**

PPAPDC2 Antibody (C-Terminus) - Product Information

Application	IF
Primary Accession	Q8IY26
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	32kDa KDa

PPAPDC2 Antibody (C-Terminus) - Additional Information**Gene ID** 403313**Other Names**

Presqualene diphosphate phosphatase, 3.1.3.-, Phosphatidic acid phosphatase type 2 domain-containing protein 2, PPAP2 domain-containing protein 2, PPAPDC2

Target/Specificity

Human PPAPDC2

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

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

PPAPDC2 Antibody (C-Terminus) - 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](http://www.uniprot.org/citations/16464866), PubMed: [19220020](http://www.uniprot.org/citations/19220020), PubMed: [20110354](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/16464866), PubMed: [23568778](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/20110354))

target="_blank">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

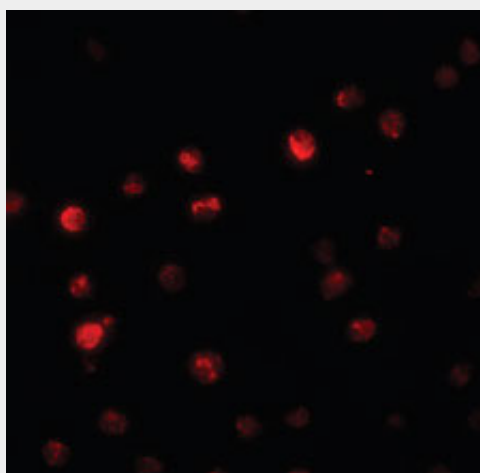
Widely expressed. Expressed in most organs, in particular gastrointestinal organs, spleen, placenta, kidney, thymus and brain.

PPAPDC2 Antibody (C-Terminus) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PPAPDC2 Antibody (C-Terminus) - Images



Immunofluorescence of PPAPDC2 in Raji cells with PPAPDC2 antibody at 20 ug/ml.

PPAPDC2 Antibody (C-Terminus) - 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 (C-Terminus) - References

Ota T., et al. Nat. Genet. 36:40-45(2004).
Humphray S.J., et al. Nature 429:369-374(2004).
Fukunaga K., et al. J. Biol. Chem. 281:9490-9497(2006).
Burkard T.R., et al. BMC Syst. Biol. 5:17-17(2011).