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PPAPDC2 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP17641a

Specification

PPAPDC2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q8IY26

PPAPDC2 Antibody (N-term) Blocking Peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PPAPDC2 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- Blocking Peptides

PPAPDC2 Antibody (N-term) Blocking Peptide - Images

PPAPDC2 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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)