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FDPS Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP2418a

Specification

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

Primary Accession	P14324
Other Accession	FPPS_HUMAN

FDPS Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 2224

Other Names
Farnesyl pyrophosphate synthase, FPP synthase, FPS, (2E, 6E)-farnesyl diphosphate synthase, Dimethylallyltranstransferase, Farnesyl diphosphate synthase, Geranyltranstransferase, FDPS, FPS, KIAA1293

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2418a was selected from the N-term region of human FDPS . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

FDPS Antibody (N-term) Blocking Peptide - Protein Information

Name FDPS (HGNC:3631)

Synonyms FPS, KIAA1293

Function
Key enzyme in isoprenoid biosynthesis which catalyzes the formation of farnesyl diphosphate (FPP), a precursor for several classes of essential metabolites including sterols, dolichols, carotenoids, and ubiquinones. FPP also serves as substrate for protein farnesylation and geranylgeranylation. Catalyzes the sequential condensation of isopentenyl pyrophosphate with the allylic pyrophosphates, dimethylallyl pyrophosphate, and then with the resultant geranylpyrophosphate to the ultimate product farnesyl pyrophosphate.

Cellular Location
Cytoplasm.

FDPS Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

FDPS Antibody (N-term) Blocking Peptide - Images

FDPS Antibody (N-term) Blocking Peptide - Background

The isoprene biosynthetic pathway supply the cell with cholesterol, ubiquinone, and various nonsterol metabolites. The farnesylpyrophosphate synthetase enzyme catalyzes the formation of geranyl and farnesylpyrophosphate from isopentenylpyrophosphate and dimethylallyl pyrophosphate. Analysis of FDPS activity and protein in rat liver, accompanied by immunofluorescence and immunoelectron microscopy studies, demonstrated that FDPS is predominantly localized in peroxisomes.1 Liver tissue from patients with the peroxisomal deficiency diseases Zellweger syndrome and neonatal adrenoleukodystrophy exhibit diminished activities of FDPS and subsequent isoprenoid synthesis.

FDPS Antibody (N-term) Blocking Peptide - References

Strausberg, R.L., et al., Proc. Natl. Acad. Sci. U.S.A. 99(26):16899-16903 (2002).Nomura, N., et al., DNA Res. 1(1):27-35 (1994).Wilkin, D.J., et al., J. Biol. Chem. 265(8):4607-4614 (1990).Sheares, B.T., et al., Biochemistry 28(20):8129-8135 (1989).