

**FDPS Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP2418a****Specification**

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**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, Dimethylallyltransferase, Farnesyl diphosphate synthase, Geranyltransferase, FDPS, FPS, KIAA1293

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP2418a](/product/products/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.<sup>1</sup> 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).