

**FDPS Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14864a****Specification**

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**FDPS Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P14324</a>
Other Accession	<a href="#">NP_001129293.1</a> , <a href="#">NP_001129294.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	48275
Antigen Region	54-82

**FDPS Antibody (N-term) - 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**

This FDPS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 54-82 amino acids from the N-terminal region of human FDPS.

**Dilution**

WB~~1:1000

**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**

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

**FDPS Antibody (N-term) - 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

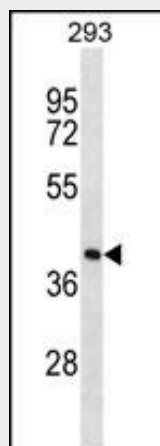
Cytoplasm.

### FDPS Antibody (N-term) - Protocols

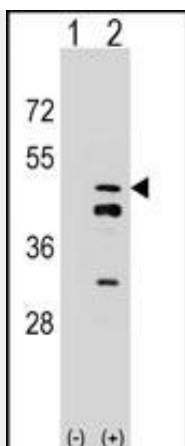
Provided below are standard protocols that you may find useful for product applications.

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

### FDPS Antibody (N-term) - Images



FDPS Antibody (N-term) (Cat. #AP14864a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the FDPS antibody detected the FDPS protein (arrow).



Western blot analysis of FDPS (arrow) using rabbit polyclonal FDPS Antibody (N-term) (Cat. #AP14864a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the FDPS gene.

### **FDPS Antibody (N-term) - Background**

This gene encodes an enzyme that catalyzes the production of geranyl pyrophosphate and farnesyl pyrophosphate from isopentenyl pyrophosphate and dimethylallyl pyrophosphate. The resulting product, farnesyl pyrophosphate, is a key intermediate in cholesterol and sterol biosynthesis, a substrate for protein farnesylation and geranylgeranylation, and a ligand or agonist for certain hormone receptors and growth receptors. Drugs that inhibit this enzyme prevent the post-translational modifications of small GTPases and have been used to treat diseases related to bone resorption. Multiple pseudogenes have been found on chromosomes 1, 7, 14, 15, 21 and X. Multiple transcript variants encoding different isoforms have been found for this gene.

### **FDPS Antibody (N-term) - References**

- Ishimoto, K., et al. *Biochem. J.* 429(2):347-357(2010)
- Choi, H.J., et al. *Yonsei Med. J.* 51(2):231-238(2010)
- Li, J., et al. *J. Immunol.* 182(12):8118-8124(2009)
- Romanelli, M.G., et al. *Genomics* 93(3):227-234(2009)
- Marini, F., et al. *Curr Med Res Opin* 24(9):2609-2615(2008)