

FDPS Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14864a

Specification

FDPS Antibody (N-term) - Product Information

Application WB,E
Primary Accession P14324

Other Accession NP 001129293.1, NP 001129294.1

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Rabbit
Polyclonal
Rabbit IgG
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

E~~Use at an assay dependent concentration.

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.

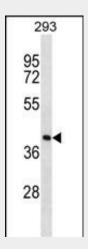
Cellular Location Cytoplasm.

FDPS Antibody (N-term) - Protocols

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

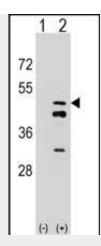
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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)