

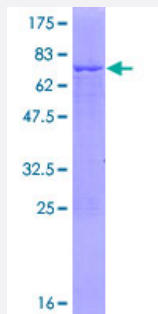
Full-Length

FDPS (Human) Recombinant Protein (P01)

Catalog # H00002224-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human FDPS full-length ORF (NP_001995.1, 1 a.a. - 419 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MPLSRWLRSVGVFLLPAPYWAPRERWLGSLRRPSLVHGYPVLAHWSARCWCQAWTEEPRALC
SSLRMNGDQNSDVYAQEKQDFVQHFSQMRVLTEDEMGHPEIGDAIARLKEVLEYNAIGGKYNRG
LTVVFAFRELVEPRKQDADSLQRAWTVGWCVELLQAFFLVADDIMDSSLTRRGQICWYQKPGV
GLDAINDANLLEACIYRLKLYCREQPYLNLIELFLQSSYQTEIGQTLDLLTAPQGNVDLVRFTKRY
KSIVKYKTAFYSFYLPAAAMYMAGIDGEKEHANAKKILLEMGFEFFQIQDDYLDLFGDPSVTGKIGTDI
QDNKCSWLVVQCLQRATPEQYQILKENYGQKEAEKVARVKALYEELDLPVFLQYEEDSYSHIMA
LIEQYAAPLPPAVFLGLARKIYKRRK

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

74.7

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — FDPS

Entrez GeneID [2224](#)

GeneBank Accession# [NM_002004.2](#)

Protein Accession# [NP_001995.1](#)

Gene Name FDPS

Gene Alias FPPS, FPS

Gene Description farnesyl diphosphate synthase (farnesyl pyrophosphate synthetase, dimethylallyltransferase, geranyltransferase)

Omim ID [134629](#)

Gene Ontology [Hyperlink](#)

Gene Summary 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

Other Designations FPP synthetase|OTTHUMP00000015807|OTTHUMP00000015808|farnesyl diphosphate synthase

Pathway

- [Biosynthesis of alkaloids derived from terpenoid and polyketide](#)
- [Biosynthesis of plant hormones](#)
- [Biosynthesis of terpenoids and steroids](#)
- [Metabolic pathways](#)
- [Terpenoid backbone biosynthesis](#)

Disease

- [Alzheimer disease](#)