

Rabbit Anti-FDPS antibody

SL13153R

Product Name:	FDPS U
Chinese Name:	法尼基二磷酸合酶抗体
Alias:	2E,6E) farnesyl diphosphate synthase; 6E)-farnesyl diphosphate synthase; Dimethylallyltranstransferase; Farnesyl diphosphate synthase; Farnesyl diphosphate synthetase; Farnesyl pyrophosphate synthase; Farnesyl pyrophosphate synthetase; Fdps; FPP synthase; FPP synthetase; FPPS; FPPS HUMAN; FPS; Geranyltranstransferase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100- 500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	48kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human FDPS:201-300/419
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	FDPS is a 419 amino acid enzyme belonging to the FPP/GGPP synthetase family. Localized to cytoplasm and peroxisome, FDPS expression is regulated by phorbol esters and polyunsaturated fatty acids. FDPS assists in cholesterol biosynthesis, post- translational protein modifications and synthesis of steroid hormones in the isoprenoid

pathway.FDPS catalyzes the formation of farnesyl diphosphate (FPP), a precursor for several classes of essential metabolites including sterols, dolichols, carotenoids, and ubiquinones. FDPS is inactivated by interferon-induced RSAD2, which may result in the disruption of lipid rafts at the plasma membrane. Existing as a homodimer, FDPS may have anti-viral effects when inactivated by RSAD2. Reduced activity of FDPS in liver may partly be the cause of Zellweger syndrome and neonatal adrenoleukodystrophy, both of which are known to be peroxisomal deficiency diseases.

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.

Subunit: Homodimer. Interacts with RSAD2. Interacts with HTLV-1 protein p13(II).

Subcellular Location: Cytoplasm.

Similarity: Belongs to the FPP/GGPP synthase family.

SWISS: P14324

Gene ID: 2224

Database links:

Entrez Gene: 2224Human

Omim: 134629Human

SwissProt: P14324Human

Unigene: 335918Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

