

FDPS Rabbit pAb

Catalog # AP100112

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P14324
Other Accession	P14324
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48275
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FDPS
Epitope Specificity	201-300/419
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the FPP/GGPP synthase family.
SUBUNIT	Homodimer. Interacts with RSAD2. Interacts with HTLV-1 protein p13(II).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	2224
Other Names	FPPS; FPS; POROK9; FPPS_HUMAN; FDPS; FPP synthase; (2E, 6E)-farnesyl diphosphate synthase; Dimethylallyltranstransferase; Farnesyl diphosphate synthase; Geranyltranstransferase; 2.5.1.10; KIAA1293; farnesyl pyrophosphate synthetase, dimethylallyltranstransferase, geranyltranstransferase
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.
----------------	---

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.