

Product datasheet for RC203499

FDPS (NM_002004) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FDPS (NM_002004) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FDPS
Synonyms:	FPPS; FPS; POROK9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203499 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCTGTCCCGCTGGTTGAGATCTGTGGGGTCTTCCTGCTGCCAGCCCCCTACTGGGCACCCGGG
AGAGGTGGCTGGTTCCCTACGGCGGCCCTCCCTGGTGCACGGGTACCCAGTCTGGCCTGGCACAGTGC
CCGCTGCTGGTCCAAGCGTGGACAGAGAACCTCGAGCCCTTTGCTCCTCCCTCAGAATGAACGGAGAC
CAGAATTCAGATGTTTATGCCAAAGAAAAGCAGGATTTTCGTTCACTTCTCCAGATCGTTAGGGTGC
TGACTGAGGATGAGATGGGGCACCCAGAGATAGGAGATGCTATTGCCCGCTCAAGGAGTCTGGAGTA
CAATGCCATTGGAGGCAAGTATAACCGGGTTTGACGGTGGTAGTAGCATTCCGGGAGCTGGTGGAGCCA
AGGAAACAGGATGCTGATAGTCTCCAGCGGGCCTGGACTGTGGGCTGGTGTGGAACTGCTGCAAGCTT
TCTTCTGGTGGCAGATGACATCATGGATTATCCCTTACCCGCCGGGGACAGATCTGCTGGTATCAGAA
GCCGGGCTGGTGGTGGATGCCATCAATGATGCTAACCTCCTGGAAGCATGTATCTACCGCTGCTGAAG
CTCTATTGCCGGGAGCAGCCCTATTACCTGAACCTGATCGAGCTTCTCCTGCAGATTCCTATCAGACTG
AGATTGGCAGACCCTGGACCTCCTCACAGCCCCCAGGGCAATGTGGATCTTGTGAGATCACTGAAAA
GAGGTACAAATCTATTGTCAAGTACAAGACAGCTTTCTACTCCTTCTACCTTCTATAGCTGCAGCCATG
TACATGGCAGGAATTGATGGCGAGAAGGAGCAGCCAATGCCAAGAAGATCCTGCTGGAGATGGGGGAGT
TCTTTCAGATTACAGGATGATTACCTTGACCTCTTTGGGGACCCAGTGTGACCGGCAAAATTGGCACTGA
CATCCAGGACAACAAATGCAGCTGGCTGGTGGTTCAGTGTCTGCAACGGGCCACTCCAGAACAGTACCAG
ATCCTGAAGGAAAATTACGGGCAGAAGGAGGCTGAGAAAGTGGCCGGGTGAAGGCCTATATGAGGAGC
TGGATCTGCCAGCAGTGTCTTGAATATGAGGAAGACAGTTACAGCCACATTATGGCTCTCATTGAACA
GTACGCAGCACCCCTGCCCCAGCCGTCTTTCTGGGGCTTGCAGCAAAATCTACAAGCGGAGAAAAG

ACGGTACGGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC203499 protein sequence
Red=Cloning site Green=Tags(s)

MPLSRWLRVSGVFLLPAPYWAPRERWLGSLRRPSLVHGYPVLAWHSARCWCQAWTEEPRALCSSLRMNGD
 QNSDVYAQEKQDFVQHF SQIVRVL TEDEMGHPEIGDAIARLKEVLEYNAIGGKYNRGLTVVVAFRELV
 RKQDADSLQRAWTVGWCVELLQAFFLVADDIMDSSLTRRGQICWYQKPGVGLDAINDANLLEACIYRLLK
 LYCREQPYLNLIELFLQSSYQTEIGQTLDLLTAPQGNVDL VRFTEKRYKSIVKYKTAFYSFYLP
 IAAM YMAGIDGEGEHANAKKILLEMGEFFQIQDDYLDLFGDPSVTGKIGTDIQDNKCSWL
 VVQCLQRATPEQYQ ILKENYGQKEAEKVARVKALYEELDLPAVFLQYEEDSYSHIMALIEQYAA
 PLPPAVFLGLARKIYKRRK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6154_f10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_002004

ORF Size: 1257 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_002004.4](#)

RefSeq Size: 1555 bp

RefSeq ORF: 1260 bp

Locus ID: 2224

UniProt ID: [P14324](#)

Cytogenetics: 1q22

Domains: polyprenyl_synt

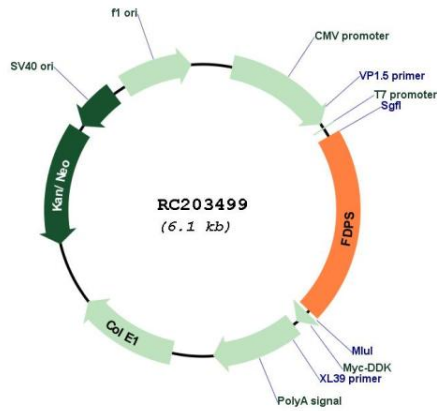
Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Terpenoid backbone biosynthesis

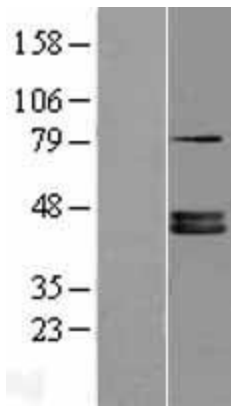
MW: 48.3 kDa

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.[provided by RefSeq, Oct 2008]

Product images:



Circular map for RC203499



Western blot validation of overexpression lysate (Cat# [LY427716]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC227945] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).