

Product datasheet for **RG203499**

FDPS (NM_002004) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	FDPS (NM_002004) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FDPS
Synonyms:	FPPS; FPS; POROK9
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG203499 representing NM_002004 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCCTGTCCCCTGGTTGAGATCTGTGGGGTCTTCCTGCTGCCAGCCCCCTACTGGGCACCCCGG
AGAGGTGGCTGGTTCCCTACGGCGGCCCTCCCTGGTGCACGGGTACCCAGTCTGGCCTGGCACAGTGC
CCGCTGCTGGTCCAAGCGTGGACAGAGAACCTCGAGCCCTTTGCTCCTCCCTCAGAATGAACGGAGAC
CAGAATTCAGATGTTTATGCCAAAGAAAAGCAGGATTTTCGTTCACTTCTCCAGATCGTTAGGGTGC
TGACTGAGGATGAGATGGGCACCCAGAGATAGGAGATGCTATTGCCCGCTCAAGGAGTCTGGAGTA
CAATGCCATTGGAGGCAAGTATAACCGGGTTTGACGGTGGTAGTAGCATTCCGGGAGCTGGTGGAGCCA
AGGAAACAGGATGCTGATAGTCTCCAGCGGGCCTGGACTGTGGGCTGGTGTGGAACTGCTGCAAGCTT
TCTTCTGGTGGCAGATGACATCATGGATTATCCCTTACCCGCCGGGGACAGATCTGCTGGTATCAGAA
GCCGGGCTGGTGGTGGATGCCATCAATGATGCTAACCTCCTGGAAGCATGTATCTACCGCTGCTGAAG
CTCTATTGCCGGGAGCAGCCCTATTACCTGAACCTGATCGAGCTTCTCCTGCAGATTCCTATCAGACTG
AGATTGGCAGACCCTGGACCTCCTCACAGCCCCCAGGGCAATGTGGATCTTGTGAGATCACTGAAAA
GAGGTACAAATCTATTGTCAAGTACAAGACAGCTTTCTACTCCTTCTACCTTCTATAGCTGCAGCCATG
TACATGGCAGGAATTGATGGCGAGAAGGAGCAGCCAAATGCCAAGAAGATCCTGCTGGAGATGGGGGAGT
TCTTTCAGATTACAGGATGATTACCTTGACCTCTTTGGGGACCCAGTGTGACCGGCAAAATTGGCACTGA
CATCCAGGACAACAAATGCAGCTGGCTGGTGGTTCAGTGTCTGCAACGGGCCACTCCAGAACAGTACCAG
ATCCTGAAGGAAAATTACGGGCAGAAGGAGGCTGAGAAAGTGGCCGGGTGAAGGCCTATATGAGGAGC
TGGATCTGCCAGCAGTGTCTTGAATATGAGGAAGACAGTTACAGCCACATTATGGCTCTCATTGAACA
GTACGCAGCACCCCTGCCCCAGCCGTCTTCTGGGGCTTGCAGCAAAATCTACAAGCGGAGAAAAG

ACGGTACGGCGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG203499 representing NM_002004
 Red=Cloning site Green=Tags(s)

MPLSRWLRSVGVFLLPAPYWAPRERWLGSLRRPSLVHGYPVLAWHSARCWCQAWTEEPRALCSSLRMNGD
 QNSDVVYAQEKQDFVQHF SQIVRVL TEDEMGHPEIGDAIARLKEVLEYNAIGGKYNRGLTVVAVFRELVEP
 RKQDADSLQRAWTVGWCVELLQAFFLVADDIMDSSLTRRGQICWYQKPGVGLDAINDANLLEACIYRLLK
 LYCREQPYLNLIELFLQSSYQTEIGQTLDLLTAPQGNVDLVRFTKRYKSIVKYKTAFYSFYLPAAAM
 YMAGIDGEKEHANAKKILLEMEFFQIQDDYLDLFGDPSVTGKIGTDIQDNKCSWLVVQCLQRATPEQYQ
 ILKENYGQKEAEKVARVKALYEELDLPVFLQYEEDSYSHIMALIEQYAAPLPPAVFLGLARKIYKRRK

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002004

ORF Size: 1257 bp

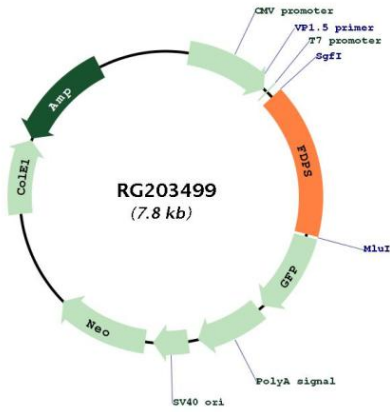
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<ol style="list-style-type: none">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:	1345 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
Gene Summary:	<p>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]</p>

Product images:



Circular map for RG203499