

Product datasheet for SC324984

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

CN: techsupport@origene.cn

OriGene Technologies, Inc.

FDPS (NM_001135822) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: FDPS (NM_001135822) Human Untagged Clone

Tag: Tag Free Symbol: FDPS

Synonyms: FPPS; FPS; POROK9

Vector: <u>pCMV6 series</u>

Fully Sequenced ORF: >NCBI ORF sequence for NM_001135822, the custom clone sequence may differ by one or

more nucleotides

ATGAACGGAGACCAGAATTCAGATGTTTATGCCCAAGAAAAGCAGGATTTCGTTCAGCAC TTCTCCCAGATCGTTAGGGTGCTGACTGAGGATGAGATGGGGCACCCAGAGATAGGAGAT GCTATTGCCCGGCTCAAGGAGGTCCTGGAGTACAATGCCATTGGAGGCAAGTATAACCGG GGTTTGACGGTGGTAGTAGCATTCCGGGAGCTGGTGGAGCCAAGGAAACAGGATGCTGAT AGTCTCCAGCGGCCTGGACTGTGGGCTGGTGTGGGAACTGCTGCAAGCTTTCTTCCTG GTGGCAGATGACATCATGGATTCATCCCTTACCCGCCGGGGACAGATCTGCTGGTATCAG AAGCCGGGCGTGGGTTTGGATGCCATCAATGATGCTAACCTCCTGGAAGCATGTATCTAC CGCCTGCTGAAGCTCTATTGCCGGGAGCAGCCCTATTACCTGAACCTGATCGAGCTCTTC CTGCAGAGTTCCTATCAGACTGAGATTGGGCAGACCCTGGACCTCCTCACAGCCCCCCAG GGCAATGTGGATCTTGTCAGATTCACTGAAAAGAGGTACAAATCTATTGTCAAGTACAAG ACAGCTTTCTACTCCTTCTACCTTCCTATAGCTGCAGCCATGTACATGGCAGGAATTGAT GGCGAGAAGGAGCACGCCAATGCCAAGAAGATCCTGCTGGAGATGGGGGAGTTCTTTCAG ATTCAGGATGATTACCTTGACCTCTTTGGGGACCCCAGTGTGACCGGCAAAATTGGCACT GACATCCAGGACAACAAATGCAGCTGGCTGGTTCAGTGTCTGCAACGGGCCACTCCA GAACAGTACCAGATCCTGAAGGAAAATTACGGGCAGAAGGAGGCTGAGAAAGTGGCCCGG GTGAAGGCGCTATATGAGGAGCTGGATCTGCCAGCAGTGTTCTTGCAATATGAGGAAGAC AGTTACAGCCACATTATGGCTCTCATTGAACAGTACGCAGCACCCCTGCCCCCAGCCGTC

TTTCTGGGGCTTGCGCGCAAAATCTACAAGCGGAGAAAG

Restriction Sites: Please inquire **ACCN:** NM 001135822

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



FDPS (NM_001135822) Human Untagged Clone - SC324984

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: <u>NM 001135822.1, NP 001129294.1</u>

 RefSeq Size:
 1357 bp

 RefSeq ORF:
 1062 bp

 Locus ID:
 2224

 UniProt ID:
 P14324

 Cytogenetics:
 1q22

Protein Families: Druggable Genome

Protein Pathways: Metabolic pathways, Terpenoid backbone biosynthesis

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]

Transcript Variant: This variant (3) lacks an alternate exon at its 5' end and uses a downstream translation initiation codon, compared to variant 1. The resulting isoform (b) has a shorter N-terminus when compared to isoform a. Both variants 3 and 4 encode the same isoform (b). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic

coordinates used for the transcript record were based on alignments.