

Product datasheet for **RC216980**

GGPS1 (NM_001037278) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: GGPS1 (NM_001037278) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: GGPS1
Synonyms: GGPPS; GGPPS1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC216980 representing NM_001037278
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTGCATAATGCCAGTTTACTCATCGATGATATTGAAGACAACCTCAAACTCCGACGTGGCTTCCAG
TGGCCACAGCATCTATGGAATCCCATCTGTCAATCTGCCAATTACGTGTATTTCTTGGCTTGA
GAAAGCTTAACCTTGATCACCCAGATGCAGTGAAGCTTTTACCCGCCAGCTTTGGAATCCATCAG
GGACAAGCCTAGATATTTACTGGAGGGATAATTACACTTGTCCCACTGAAGAAGATATAAAGCTATGG
TGCTGCAGAAAACAGGTGGACTGTTGGATTAGCAGTAGGTCTCATGCAGTTGTTCTCTGATTACAAAGA
AGATTTAAAACCGCTACTTAATACACTTGGGCTCTTTTCCAAATTAGGGATGATTATGCTAATCTACAC
TCCAAAGAATATAGTGAAAACAAAAGTTTTTGTGAAGATCTGACAGAGGGAAAGTTCTCATTTTCTACTA
TTCATGCTATTTGGTCAAGGCCTGAAAGCACCCAGGTGCAGAATATCTTGCGCCAGAGAACAGAAAACAT
AGATATAAAAAAATACTGTGTACATTATCTTGAGGATGTAGGTTCTTTGAATACACTCGTAATACCCCTT
AAAGAGCTTGAAGCTAAAGCCTATAAACAGATTGATGCACGTGGTGGAAACCCTGAGCTAGTAGCCTTAG
TAAACACTTAAGTAAGATGTTCAAAGAAGAAAATGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC216980 representing NM_001037278
Red=Cloning site Green=Tags(s)

MLHNASLLIDDIEDNSKLRRGFPVAHSIYGIPSVINSANYVYFLGLEKVLTDHPDAVKLFTRQLLELHQ
 GQGLDIYWRDNYTCPTEEEYKAMVLQKTGGLFGLAVGLMQLFSDYKEDLKPLNLTGLFFQIRDDYANLH
 SKEYSENKSFCEDLTEGKFSFPTIHAIWSRPESTQVQNILRQRTEIDIKKYCVHYLEDVGSFEYTRNTL
 KELEAKAYKQIDARGGPELVALVKHLSKMFKEENE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1503_a10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001037278

ORF Size: 738 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001037278.2](#)

RefSeq Size: 2828 bp

RefSeq ORF: 741 bp

Locus ID: 9453

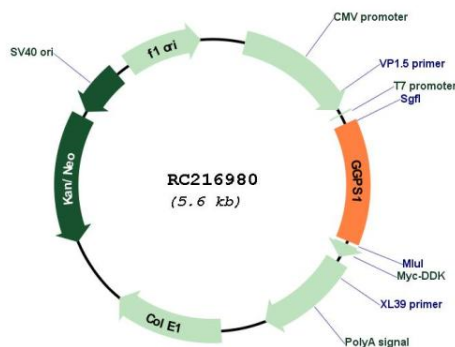
Cytogenetics: 1q42.3

Protein Pathways: Metabolic pathways, Terpenoid backbone biosynthesis

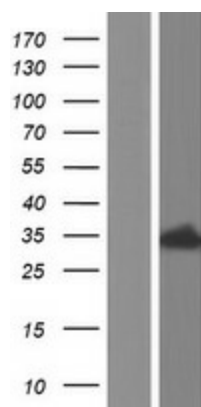
MW: 28.2 kDa

Gene Summary: This gene is a member of the prenyltransferase family and encodes a protein with geranylgeranyl diphosphate (GGPP) synthase activity. The enzyme catalyzes the synthesis of GGPP from farnesyl diphosphate and isopentenyl diphosphate. GGPP is an important molecule responsible for the C20-prenylation of proteins and for the regulation of a nuclear hormone receptor. Alternate transcriptional splice variants, both protein-coding and non-protein-coding, have been found for this gene. [provided by RefSeq, Sep 2010]

Product images:



Circular map for RC216980



Western blot validation of overexpression lysate (Cat# [LY421937]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216980 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).