

Product datasheet for RC212263

DPS1 (PDSS1) (NM_014317) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DPS1 (PDSS1) (NM_014317) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DPS1
Synonyms:	COQ1; COQ1A; COQ10D2; DPS; hDPS1; SPS; TPRT; TPT; TPT 1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212263 representing NM_014317 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCCTCGCGCTGGTGGCGGTGGCGGCGGGCTGCTCCTGGAAGCCGGCGGCGGAGCCCCGGGCCG
GCTCCCCGGCCGTGCGGGACCGTTGGGGCCGAGCGCCGCTGCCGAAGTCCGCGCGCAGGTTTCATAGGCG
GAAGGGACTTGACTTGTCTCAGATACCCATATTAATCTTGTGAAGCATTTAACATCTGCCTGTCCAAT
GTATGTCGTATATCACGGTTTCATCACACAACCCAGACAGTAAACACACAGTGGTAAAAATACACCG
ATCCTTTCAAACCTCGGTTGGAGAGACTGAAAGGTCTGTATGAGGACATTAGAAAGGAAGTCTTATATC
AACATCAGAACTTAAGGAAATGTCTGAGTACTACTTTGATGGGAAAGGAAAGCCTTTCGACCAATTATT
GTGGCGCTAATGGCCGAGCATGCAATATTCATCATAACAACCTCCCGACATGTGCAAGCCAGCCAGCGCG
CCATAGCCTTAATTGCAGAAATGATCCACACTGCTAGTCTGGTTCACGATGACGTTATTGACGATGCAAG
TTCTCGAAGAGGAAAACACACAGTTAATAAGATCTGGGGTAAAAAGAAGGCTGTTCTTGCTGGAGATTTA
ATTCTTCTGCAGCATCTATAGCTCTGGCAGCAATTGAAATACAACCTGTTATATCTATTTTAAACCAAG
TTATTGAAGATTTGGTGGTGGTGAATTTCTTCAGCTCGGGTCAAAGAAAATGAGAATGAAGATTTGC
ACACTACCTTGAGAAGACATTCAAGAAGACCGCCAGCCTGATAGCCAACAGTTGTAAAGCAGTCTCTGTT
CTAGGATGTCACCGACCCAGTGGTGCATGAGATCGCCTATCAGTACGAAAAAATGTAGGAATAGCTTTTC
AGCTAATAGATGATGATTGGACTTCACCTCGTGTTCGACCAGATGGGCAAAACCAACATCAGCTGATCT
GAAGCTCGGGTTAGCCTGCTGCTGCTGTTTGCCTGTCAGCAGTTCCAGAAAATGAATGCTATGATC
ATGCGACGGTTCAGTTTGCCTGGAGATGTAGACAGAGCTCGACAGTATGTACTACAGAGTATGTTGTC
AACAAACAACCTACCTCGCCAGCAGTACTGCCATGAAGCAATAAGAGAGATCAGTAAACTTCGACCATC
CCCAGAAAGAGATGCCCTCATTGAGCTTTCAGAAATTGTAAGTACTCACAAGAGATAAA

ACGGTACGGCGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC212263 representing NM_014317
 Red=Cloning site Green=Tags(s)

MASRWWRRGCSWKPAARSPGPGSPGRAGPLGPSAAAEVRAQVHRRKGLDL SQIPYINL VKHL TSACPN
 VCRISR FHHTTPDSKTHSGEKYD PFKLGWRDLKGLYEDIRKELLISTSELKEMSEYFFDGKGKAFRPII
 VALMARACNIHHNNSRHVQASQRAIALIAEMIHTASLVHDDVIDDASSRRGKHTVNKIWGEKKAVLAGDL
 ILSAASIALARIGNTTVISILTQVIEDLVRGEFLQLGSKENENERFAHYLEKTFKKTASLIANSCKAVSV
 LGCPDPVVHEIA YQYGNVGI AFQLIDDVLDFTSCSDQMGKPTSADLKLGLATGPVLFACQQFPEMNAMI
 MRRFSLPGDVDRARQYVLQSDGVQQTYYLAQQYCHEAIREISKLRPSPERDALIQLSEIVLTRDK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8025_h08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_014317

ORF Size: 1245 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_014317.5](#)

RefSeq Size: 1679 bp

RefSeq ORF: 1248 bp

Locus ID: 23590

UniProt ID: [Q5T2R2](#)

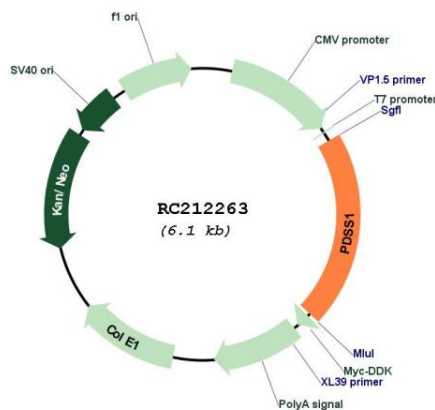
Cytogenetics: 10p12.1

Protein Pathways: Terpenoid backbone biosynthesis

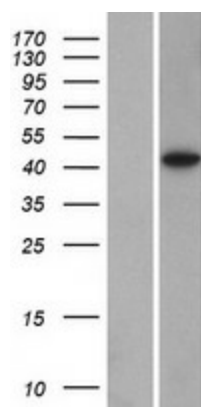
MW: 46.1 kDa

Gene Summary: The protein encoded by this gene is an enzyme that elongates the prenyl side-chain of coenzyme Q, or ubiquinone, one of the key elements in the respiratory chain. The gene product catalyzes the formation of all trans-polyprenyl pyrophosphates from isopentyl diphosphate in the assembly of polyisoprenoid side chains, the first step in coenzyme Q biosynthesis. The protein may be peripherally associated with the inner mitochondrial membrane, though no transit peptide has been definitively identified to date. Defects in this gene are a cause of coenzyme Q10 deficiency. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC212263



Western blot validation of overexpression lysate (Cat# [LY415361]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212263 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).