

Product datasheet for RC212317

PPCS (NM_024664) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPCS (NM_024664) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PPCS
Synonyms:	CMD2C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212317 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGAAATGGATCCGGTAGCCGAGTCCCCCAGCCTCCCGGTGCTGCGCGTGGGCTGAGGTTATGG
CTCGCTTCGCGGCCAGGCTGGGCGCGCAGGGCCGGCGGTGGTGTGGTTACGTCAGGCGGCACCAAGGT
CCCACTGGAAGCGCGCCGGTGCCTTCTGGACAACCTCAGCAGCGGGCGCGGTGCAACCTCGGCC
GAGGCCTTCTAGCCCGCGCTACGGGGTCTGTCTTGTATCGCGCTCGCTCTGCCTTCCCTATGCC
ACCGCTTCCCACCCAGACTTGGCTGTCCGCTCTGCGGCCTTCGGGCCAGCCCTTCGGGCTTGCTGAG
CCTGGAGCCGAGGAGAATGCACTTCCGGTTTTGGTCTGAGGCTCTGAGGAGCTACCAGGAGCTGCGGCT
GCAGGCACCTTCTGGCAGTAGAGTTACCACTTTGGCGACTATTTGCATCTGTTGCAGGCTGCGGCC
AGGCACTCAATCCGCTAGGCCCTTCTGCGATGTTTTACCTGGCTGCGGCTGTGTCAGATTCTATGTTCC
TGTCTCTGAAATGCCTGAACACAAGATCCAGTCATCTGGGGGCCACTGCAGATAACAATGAAGATGGTG
CCAAAAGTGTCTTCTCTTTGGTTAAAGATTGGGCTCCAAAGCATTTATAATTTCTTTAAGTTGGAGA
CTGACCCCGCCATTGTAATTAATCGAGCTCGGAAGGCTTTGGAATTTATCAGCATCAAGTGGTGGTGGC
TAATATCCTTGAGTCACGACAGTCCTTTGTGTTATTGTAACCAAGACTCGAAACCAAGTTATTGCTA
TCAGAGGAAGAAATAGAAAAGCGGTAGAGATAGAAGAGAAGATAGTGGATAATCTTCAGTCTCGACACA
CAGCTTTTATAGGTGACAGAAAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC212317 protein sequence
Red=Cloning site Green=Tags(s)

MAEMDPVAEFPQPPGAARWAEVMARFAARLGAQGRVVLVTSGGTKVPLEARPVRFLEDFSSGRRGATSA
 EAFLAAGYGVFLYRARSAPFYAHRFPQTWLSALRPSGPALSGLLSLEAEENALPGFAEALRSYQAAAA
 AGTFLAVEFTTLADYLHLLQAAAQALNPLGPSAMFYLAADVSDFYVPVSEMPEHKIQSSGGPLQITMKMV
 PKLLSPLVKDWAPKAFIISFKLETDPDIVINRARKALEIYQHVVVANILESRSQSFVIVTKDSETKLLL
 SEEEIEKGVIEEKIVDNLQSRHTAFIGDRN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6821_e10.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_024664

ORF Size: 933 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_024664.4](#)

RefSeq Size: 2312 bp

RefSeq ORF: 936 bp

Locus ID: 79717

UniProt ID: [Q9HAB8](#)

Cytogenetics: 1p34.2

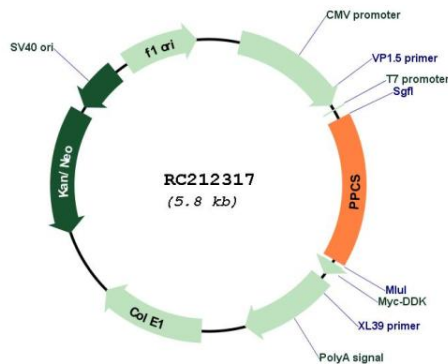
Domains: dfp

Protein Pathways: Metabolic pathways, Pantothenate and CoA biosynthesis

MW: 34 kDa

Gene Summary: Biosynthesis of coenzyme A (CoA) from pantothenic acid (vitamin B5) is an essential universal pathway in prokaryotes and eukaryotes. PPCS (EC 6.3.2.5), one of the last enzymes in this pathway, converts phosphopantothenate to phosphopantothenoylcysteine (Daugherty et al., 2002 [PubMed 11923312]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RC212317