

Product datasheet for **RR207868**

Coq2 (NM_001044255) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Coq2 (NM_001044255) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Coq2
Synonyms: PHB:PPT; RGD1306722
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RR207868 representing NM_001044255
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCTGCGCTTGGGAGGCGCGGGCTAGTGC GGCCCTGCGGGTGGTGTGCGCCGCATGGCTGCGAGGTC
 CGGGTGGACTCCCGCTGGCCCTGGCGCGCACCACAGGGACGTGGGAGCGCGGGACCGGCGAGCGCCGGC
 CTCGGGAGCGCAGCGGGCGCGCACTCAGCCTGTCCGCCGACCGTAGTGAACCGGCGCCCCCGCCG
 CTGCAGCCCTACCTGCGGCTCATGCGCCTGGACAAGCCCATCGAACCTGGCTGTGTATTTGCCATGCA
 CTTGGAGCATTGGTCTGGCCGTGACCCGGTTGTTTTCTGACTGGTATATGTTATCACTCTTTGGCAC
 TGGAGCTATTCTCATGCGTGGAGCAGGCTGTACTATTAATGACATGTGGACCGTGACTTCGATAAAAAG
 GTCGAGAGGACAGCAAACCGCCCAATCGCCGCGGAGACATTTTCAGCCTTCCAGTCTTCGTTCTCCTTG
 GGGCACAGCTGACCTTGGCACTGGGCGTTCTCCTGCATCTGAACTACTACAGTATAGCAATGGGAGCAGC
 ATCCTTACTTCTGTGTCACCTACCCCTCATGAAAAGAGTCACGTTCTGGCCTCAGTTAGCCTTGGGC
 TTGACTTTAATTGGGTGCGTTACTCGGATGGTCTGTGTCAAGGGCTCCTGTGATCCAGCTGTGTGCC
 TGCCTCTTTATTTTCTGGAGTTATGTGGACACTGATATATGATACTATTTATGCCACCAGGACAAGAA
 AGATGATGCTCTGATTGGCCTGAAGTCCACAGCTCTGCTCTTCAGGGAGAACACCAAGCAGTGGCTCAGT
 GGCTTTGGGTGCGCATGGTGGGAGCGCTGAGCCTGGTGGGAGCCAGCAGTGGTCAGACCCCTCCCTTACT
 ACGCTGCCGTGGCTGCAGTGGGAGCCACCTGGCTCACCAGATTTACACCGTGGACATCCACAGAGCCGA
 GGACTGCTGGGAAAAGTTTACCTCCAACCGCACAGTAGGCCTACTCCTGTTCTTAGGGATTGTGCTTGGG
 AATTTGTACAAAGACAAGCCGGACGAGACGAAGGGAGTGGACGCTGTTGGAGAGGAAAGTGAAGCGGACAA
 GC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RR207868 representing NM_001044255
 Red=Cloning site Green=Tags(s)

MLRLGGAGLVRGLRVVSPAWLRGPGGLPLALARTTGTSGARRRAPASGTQRGRALSLAAAVVNSAPRP
 LQPYLRMLRLDKPIGTWLLYLPTWSIGLAADPGCFPDWYMLSLFGTGAILMRGAGCTINDMWRDRDFDKK
 VERTANRPIAAGDISAFQSFVFLGAQLTLALGVLLHLNYYSIAMGAASLLLVVITYPLMKRVTFWPQLALG
 LTFNWGALLGWSAVKGSDDPAVCLPLYFSGVMWTLIYDTIYAHQDKDDALIGLKSTALLFRENTKQWLS
 GFGVAMVGALSLVGASSGQTLPYAAVAAVGAHLAHQIYTVDIHRAEDCWEKFTSNRTVGLLLFLGIVLG
 NLYKDKPDETKGVDVAVGEESERTS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001044255

ORF Size: 1122 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_001044255.1](#), [NP_001037720.1](#)

RefSeq Size: 1797 bp

RefSeq ORF: 1125 bp

Locus ID: 498332

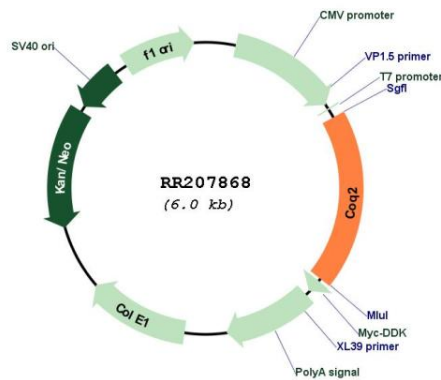
UniProt ID: [Q499N4](#)

Cytogenetics: 14p22

MW: 40.4 kDa

Gene Summary: Catalyzes the prenylation of para-hydroxybenzoate (PHB) with an all-trans polyprenyl group. Mediates the second step in the final reaction sequence of coenzyme Q (CoQ) biosynthesis, which is the condensation of the polyisoprenoid side chain with PHB, generating the first membrane-bound Q intermediate.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR207868