

Product datasheet for RC224598

Ceruloplasmin (CP) (NM_000096) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ceruloplasmin (CP) (NM_000096) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ceruloplasmin
Synonyms:	CP-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224598 representing NM_000096 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGAAGATTTTGATACTTGGTATTTTTCTGTTTTATGTAGTACCCAGCCTGGGCGAAAGAAAAGCATT
ATTACATTGGAATTATTGAAACGACTTGGGATTATGCCTCTGACCATGGGAAAAGAACTTATTTCTGT
TGACACGGAACATTCCAATATCTATCTTCAAAATGGCCAGATAGAATTGGGAGACTATATAAGAAGGCC
CTTTATCTTCAGTACACAGATGAAACCTTTAGGACAATATAGAAAAACCGGTCTGGCTTGGGTTTTAG
GCCCTATTATCAAAGCTGAAACTGGAGATAAAGTTTTATGTACACTTAAAAACCTTGCCCTAGGCCCTA
CACCTTTCAATTCACATGGAATAACTTACTATAAGGAACATGAGGGGGCCATCTACCTGATAACACCACA
GATTTTCAAAGAGCAGATGACAAAGTATATCCAGGAGAGCAGTATACATACATGTTGCTTGCCACTGAAG
AACAAAGTCTGGGGAAGGAGATGGCAATTGTGTGACTAGGATTTACCATTCCCACATTGATGCTCCAAA
AGATATTGCCCTCAGGACTCATCGACCTTTAATAATCTGTAAAAAAGATTCTCTAGATAAAGAAAAAGAA
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CAGAATGTATTCTGTGAATGGATACACTTTTGGAAAGTCTCCAGGACTCTCCATGTGTGCTGAAGACAGA
GTAAAATGGTACCTTTTTGGTATGGGTAATGAAGTTGATGTGCACGCAGCTTTCTTTCACGGGCAAGC
TGACTAACAAGAACTACCGTATTGACACAATCAACCTCTTTCCTGCTACCTGTTTGATGCTTATATGGT
GGCCAGAACCTGGAGAATGGATGCTCAGCTGTGAGAATCTAAACCATCTGAAAGCCGGTTTGCAAGCC
TTTTTCCAGGTCCAGGAGTGAACAAGTCTTCATCAAAGGATAATATCCGTGGGAAGCATGTTAGACACT
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AAAAAGCTGGTTTATCGTGAGTACACAGATGCCTCCTTCAAAAATCGAAAGGAGAGGCCCTGAAGAAG
AGCATCTTGGCATCCTGGTCTGTCTTTGGGAGAGGTTGGGAGACACCATCAGAGTAACTTCCATAA
CAAAGGAGCATATCCCTCAGTATTGAGCCGATTGGGGTGAATCAATAAGAACAACGAGGGCACATAC



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TATTCCTCAAATTACAACCCAGAGCAGAAGTGTGCCTCCTTCAGCCTCCCATGTGGCACCACAGAAA
 CATTACACATGAATGGACTGTCCCAAAGAAGTAGGACCCACTAATGCAGATCCTGTGTCTAGCTAA
 GATGATATTATTCTGTGTGGATCCCACTAAAGATATTTCACTGGGCTTATTGGGCAATGAAAAATGC
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 GGACCTCTACAGTGGATTAATTGGCCCCCTGATTGTTTGTGCGAAGACCTACTTGAAGTATTCAATCCC
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 ACATCAAAACATACTCTGATCACCCGAGAAAGTAAACAAAGATGATGAGGAATTCATAGAAAGCAATAA
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 AACTGGTATCTGATGGGAATGGCAATGAAATAGACTTACACACTGTACATTTTACGGCCATAGCTTCC
 AATAACAAGCACAGGGGAGTTTATAGTTCTGATGTCTTTGACATTTCCCTGGAACATACCAAACCTAGA
 AATGTTTTCAAGAACACCTGGAATTTGGTTACTCCACTGCCATGTGACCCGACCACATTATGCTGGAATG
 GAAACCACTTACACCGTTCTACAAAATGAAGACACCAAATCTGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224598 representing NM_000096
 Red=Cloning site Green=Tags(s)

MKILILGIFLFLCSTPAWAKEKHYYIGIIEITTDWDYASDHGEKLLISVDTEHSNIYLQNGPDRIGRLYKKA
 LYLQYTDDEFRTTIEKPVWLGLGPIIKAETGDKVYVHLKNLASRPYTFHSHGITYYKEHEGAIYDNTT
 DFQRADDKVYPGEQYTYMLLATEEQSPGEGDGNVTRIIYHSHIDAPKDIASGLIGPLIICKDSDLKEKE
 KHIDREFVVMFVVDENFSWYLEDNIKYCSEPEKVDKDNEDFQESNMYSVNGYTFGSLPGLSMCAEDR
 VKWYLFMGNEVDVHAFFHGGQALTNKNYRIDTINLFPATLFDAYMVAQNPGEWMLSCQNLNHLKAGLQA
 FFQVQECNKSSSKDNIRGKHVRHYIIAAEEIIWNYAPSGIDIFTKENLTAPGSDSAVFFEQGTRIGGSY
 KKL VYREYTDASF TNRKERGP EEEHLGILGPVIWAEVGD TIRVTFHNGAYPLSIEPIGVRFNKNNEGTY
 YSPNYPQRSVPPSASHVAPTEFTTYEWTVPKEVGPTNADPVCLAKMYYSAVDPTKIDFTGLIGPMKIC
 KKGSLHANGRQKDVDKEFYLFPTVFDENESLLLEDNIRMF TAPDQVDKEDDFQESNMHSMNGFMYGN
 QPGLTMCKGDSVVWYLF SAGNEADVHGIYFSGNTYLWRGERRDTANLFPQ TSLTHMWPDEGTGFNVECL
 TTDHYTGMKQKYTVNQRRQSEDSTFYLGERTYYIAAVEVEWDYSPQREWEKELHHLQE QNVSN AFLDK
 GEFYIGSKYKKVYRQYTDSTFRVPVERKAE EHLGILGPQLHADVGDVKV IIFKNMATRPYSIHAHVQ
 TESSTVPTLPGETLTYVWKIPERSGAGTEDSACIPWAYYSTVDQVKDL YSLGIGPLIVCRRPYLKVFPN
 RRKLEFALLFLVFDENESWYLD DNIKTYSDHPEKV NKDDEEFIESNMHAI NGRMFGNLQGLTMHVGDEV
 NWYLMGMGNEIDLHTVHFHGH SFQYKHRGVYSSDVF DIFPGTYQTLEMFPRTPGIWLLHCHVTDHIHAGM
 ETTYTVLQNE DTKSG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mg3825_c05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000096

ORF Size: 3195 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_000096.1](#), [NP_000087.1](#)

RefSeq Size: 3321 bp

RefSeq ORF: 3198 bp

Locus ID: 1356

UniProt ID: [P00450](#)

Cytogenetics: 3q24-q25.1

Domains: Cu-oxidase

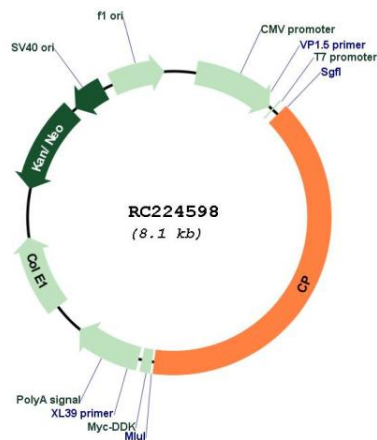
Protein Families: Druggable Genome

Protein Pathways: Porphyrin and chlorophyll metabolism

MW: 122.21 kDa

Gene Summary: The protein encoded by this gene is a metalloprotein that binds most of the copper in plasma and is involved in the peroxidation of Fe(II)transferrin to Fe(III) transferrin. Mutations in this gene cause aceruloplasminemia, which results in iron accumulation and tissue damage, and is associated with diabetes and neurologic abnormalities. Two transcript variants, one protein-coding and the other not protein-coding, have been found for this gene. [provided by RefSeq, Feb 2012]

Product images:



Circular map for RC224598