

Product datasheet for **RG224598**

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:	TurboGFP
Symbol:	CP
Synonyms:	CP-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG224598 representing NM_000096 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGATTTTGATACTTGGTATTTTTCTGTTTTATGTAGTACCCAGCCTGGGCGAAAGAAAAGCATT
ATTACATTGGAATTATTGAAACGACTTGGGATTATGCCTCTGACCATGGGAAAAGAACTTATTTCTGT
TGACACGGAACATTCCAATATCTATCTTCAAAATGGCCAGATAGAATTGGGAGACTATATAAGAAGGCC
CTTTATCTTCAGTACACAGATGAAACCTTTAGGACAATATAGAAAAACCGGTCTGGCTTGGGTTTTAG
GCCCTATTATCAAAGCTGAAACTGGAGATAAAGTTTTATGTACACTTAAAAACCTTGCCCTAGGCCCTA
CACCTTTCAATTCACATGGAATAACTTACTATAAGGAACATGAGGGGGCCATCTACCTGATAACACCACA
GATTTTCAAAGAGCAGATGACAAAGTATATCCAGGAGAGCAGTATACATACATGTTGCTTGCCACTGAAG
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AGATATTGCCCTCAGGACTCATCGACCTTTAATAATCTGTAAAAAAGATTCTCTAGATAAAGAAAAAGAA
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ACAACATTAACCTACTGCTCAGAACCAGAGAAAGTTGACAAAGACAACGAAGACTTCCAGGAGAGTAA
CAGAATGTATTCTGTGAATGGATACACTTTTGGAAAGTCTCCAGGACTCTCCATGTGTGCTGAAGACAGA
GTAAAAATGGTACCTTTTTGGTATGGGTAATGAAGTTGATGTGCACGCAGCTTTCTTTCACGGGCAAGC
TGACTAACAAGAACTACCGTATTGACACAATCAACCTCTTTCCTGCTACCTGTTTGATGCTTATATGGT
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TTTTTCCAGGTCCAGGAGTGAACAAGTCTTCATCAAAGGATAATATCCGTGGGAAGCATGTTAGACACT
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TATTCCTCCAAATTACAACCCCGAGAGCAGAAGTGTGCCTCCTTCAGCCTCCCATGTGGCACCCACAGAAA
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 AATGTTTTCAAGAACACCTGGAATTTGGTTACTCCACTGCCATGTGACCCGACCACATTATGCTGGAATG
 GAAACCACTTACACCGTTCTACAAAATGAAGACACCAAACTCTGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG224598 representing NM_000096

Red=Cloning site Green=Tags(s)

MKILILGIFLFLCSTPAWAKEKHYIIGIETTWDYASDHGEKKLISVDTEHSNIYLQNGPDRIGRLYKKA
 LYLQYTDDEFRTTIEKPVWLGFLGPIIKAETGDKVYVHLKNLASRPYTFHSHGITYYKEHEGAIYDNTT
 DFQRADDKVVYPGEQYTYMLLATEEQSPGEGDNCVTRIVYHSHIDAPKDIASGLIGPLIICKKDSLDEKE
 KHIDREFVVMFVVDENFSWYLEDNIKYCSEPEKVDKDNEDFQESNRMYSVNGYTFGSLPGLSMCAEDR
 VKWYLFMGNEVDVHAFFHQALTNKNYRIDTINLFPATLFDAYMVAQNPGEWMLSCQNLNHLKAGLQA
 FFQVQECNKSSSKDNIRGKHVRHYIIAAEEIIWNYAPSGIDIFTKENLTAPGSDSAVFFEQGTRIGGSY
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 TDHYTGGMKQKYTVNQRRQSEDSTFYLGERTYYIAAVEVEWDYSPQREWEKELHHLQE QNVSN AFLDK
 GEFYIGSKYKKVYRQYTDSTFRVPVERKAE EHLGILGPQLHADVGDVKV IIFKNMATRPYSIHAHG VQ
 TESSTVPTLPGETLTYVWKIPERSGAGTEDSACIPWAYYSTVDQVKDL YSGLIGPLIVCRRPYLKVFPN
 RRKLEFALLFLVFDENESWYLDNIIKTYSDHPEKVNKDDEEFIESNMHAI NGRMFGNLQGLTMHVGDV
 NWYLMGMGNEIDLHTVHFHGHFSFYKHRGVYSSDVFDFIPGTYQ TLEMFPRTPGIWLLHCHVTDHIHAGM
 ETTYTVLQNE DTKSG

TRTRPLE - GFP Tag - V

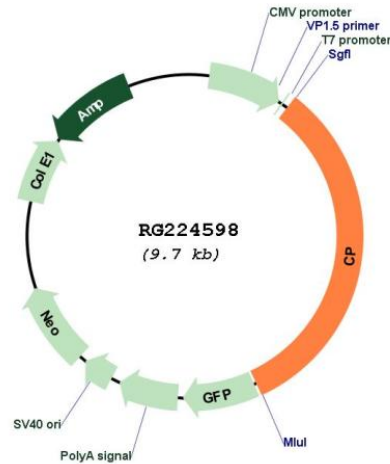
Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



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:	<ol style="list-style-type: none">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:	<u>NM_000096.1</u> , <u>NP_000087.1</u>
RefSeq Size:	3321 bp
RefSeq ORF:	3198 bp
Locus ID:	1356
UniProt ID:	<u>P00450</u>
Cytogenetics:	3q24-q25.1
Domains:	Cu-oxidase
Protein Families:	Druggable Genome
Protein Pathways:	Porphyrin and chlorophyll metabolism
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]