

## Product datasheet for MR222884

### Cp (NM\_001042611) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Cp (NM_001042611) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Cp
Synonyms:	D3Erttd555e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR222884 representing NM_001042611 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGAAGTTTTTGCTGCTTAGCACATTTATATTTTTGTATAGTTCCTTAGCCTTGCAAGAGATAAGCATT  
ATTTTCATTGGAATTACTGAAGCAGTCTGGGACTATGCTTCTGGCACTGAAGAAAAGAACTTATTTTCAGT  
TGACACGGAACAGTCCAATTTCTATCTTCAAAATGGTCCAGATCGTATTGGAAGAAAATATAAGAAGGCC  
CTTTATTTTGGTACACAGATGGCACCTTTAGTAAGACTATAGACAAACCAGCCTGGCTAGGGTTTTTAG  
GCCCTGTCATCAAAGCTGAAGTTGAAGATAAAGTTTATGTTCACTTAAAGAACCTTGCCCTAGGATCTA  
CACTTTTCATGCACATGGGGTAACGTACACCAAGGAGATGAGGGAGCCGCTACCTGACAACACCACT  
GATTTTCAACGGGCTGATGACAAAGTGCTCCCGACAACAGTATGTGTATGTGCTGCATGCCAATGAGC  
CAAGTCCTGGAGAGGGAGACAGCAATTGTGTGACCAGGATTTACCACTCCCATGTTGATGCTCCAAAAGA  
TATTGCATCAGGACTCATAGGACCTCTAACTCTGTAAAAAGGTTCTCTATATAAGGAAAAAGAGAAA  
AATATTGACCAAGAATTTGTAATAATGTTCTGTGGTGGATGAAAACTCAGCTGGTATCTGGAAGATA  
ACATCAAACCTTCTGCTCTGAACCCGAGAAAGTTGATAAAGACAATGAAGACTTCCAGGAAAGCAACAG  
GATGTACTCTATAAATGGATATACATTTGGAAGCCTCCAGGGCTCTCGATGTGTGCAGCAGACAGAGTG  
AAGTGGTACCTTTTTGGTATGGGTAATGAAGTTGATGTGCATTCAGCTTTCTTTTCATGGCCAGCCCTGA  
CCAGCAGGAATCAAACCGATATAATCAACCTGTTCCCTGCCACCCTAATTGATGCTTATATGGTGGC  
CCAGAATCCTGGAGTCTGGATGCTCAGTTGCCAGAACCTAAACCTCTGAAAGCTGGGTTGCAGGCCCTT  
TTCCAGGTTCTGACTGTAAACAAGCCCTCGCCAGAGGATAATATCCAAGTAGGCATGTGAGACACTATT  
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AGGACAGCATCCTCTCAGCATTAGCCAATGGGAGTAAGTTTCACTGCAGAAAATGAGGGAACATACTAT



GGCCACCAGGTCGCTCCTCACAGCAAGCAGCCTCCCATGTGGCTCCCAAAGAAACCTTTACATACGAAT  
 GGACTGTCCCAAGAAATGGGACCCACTTATGCAGATCCTGTGTGCCTATCTAAGATGTACTACTCTGG  
 CGTTGACCCCAAGATATATTTACTGGGCTTATTGGGCAATGAAAAATGCAAGAAAGGCAGCTTA  
 CTTGCTGATGGGAGACAGAAAGATGTAGACAAAGATTCTACTTGTTCACAGTGTGGATGAGAATG  
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 TTTTCTTCTGTTTCTAGTATTTGATGAGAATGAATCTTGGTACTTAGATGATAACATCAAAACATACT  
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 GAGTATACAGTTCTGATGCTTTGACCTTTCCCTGGAACATACCAAACCTAGAAATGTTTCCCAAAAC  
 ACCTGGAACTGTTTACTCCACTGCCACGTGACTGACCATGTCCATGCTGGGATGGCAACTACCTACACT  
 GTTTTACCAGTAGAACAGTATCATCTCAGAGTTACAGGATGACCTGGAACATCCTCTATACACTACTAA  
 TCAGCATCATTATTTTATTCAAATGTCTACCAAGGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR222884 representing NM\_001042611  
 Red=Cloning site Green=Tags(s)

MKFLLLSTFIFLYSSLALARDKHIFYGITEAVWDYASGTEEEKLISVDTEQSNFYLQNGPDRIGRKYKKA  
 LYFEYTDGTFSTIDKPAWLGFLGPVIAEVEDKVVVHLKNLASRIYTFHAHGVTYTKEYEGAVYPDNTT  
 DFQRADDKVLPQQYVYVLANEPSPGEGDSNCVTRIIYHSHVDAPKDIASGLIGPLILCKKGSLEYEKEK  
 NIDQEFVLMFSVVDENLSWYLEDNIKTFCESEPEKVDKDNEDFQESNRMYSINGYTFGSLPGLSMCAADR  
 KWYLFMGNEVDVHSAFFHGQALTSRNYQTDIINLFPATLIDAYMVAQNPQVWMLSCQNLNHLKAGLQAF  
 FQVRDCNKPSPEDNIQDRHVRHYIIAAEEVIWNYAPSGTDIFTGENLTALESDSRVFFEQGATRIIGGSYK  
 KMAFREYTDGFSFTRNRKQRPDEEHLGILGPVIWAEVGDITKVTFFHNKGQHPLSIQPMGVSFATENEGTY  
 GPPGRSSQQAASHVAPKETFTYEWTPKEMGPTYADPVLCKMYYSVGVDPKDFITGLIGPMKICKKGS  
 LADGRQKDVDFEYLFPTVFDENESLLDDNIRMFTTAPDQVDKEDDFQESNMHSMNGFMGYGNQPLN  
 MCLGESIVWYLFAGNEADVHGIYFSGNTYLSKGERRDTANLFPKSLTLLMNPDTKGTDFDVECLTDDHY  
 TGGMKQKYTVNQCRQFEDFTVYLGERTYVAAVEVEWDYSPSRAWEKELHHLQEQVNSNVFLDKEEFFI  
 GSKYKVVYRQFTDSSFREQVKRRAEDEHLGILGPIHANVGDVKVVFKNMATRPYSIIAHGVKTESST  
 VVPTLPGEVRTYTWQIPERSGAGREDSACIPWAYYSTVDVRKDLYSGLIGPLIVCRKSYVKVFSPPKKME  
 FFLFLVFDENESWYLDNIKTYSEHPEKVNKDNEEFLESNKMHAINGKMFNLQGLTMHVKDEVNYYVM  
 GMGNEIDLHTVHFHGHFSFYKHRGVYSSDVFDFPQTYQTEMFQTPGTWLLHCHVTDHVVHAGMATTYT  
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

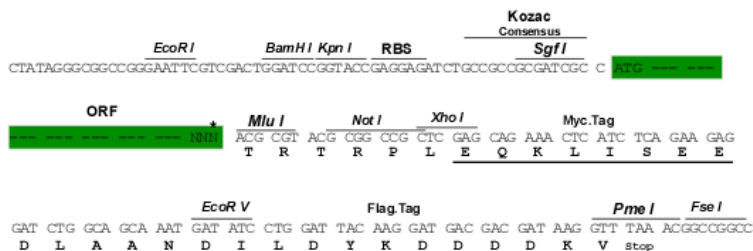
**Chromatograms:**

[https://cdn.origene.com/chromatograms/ja1692\\_a03.zip](https://cdn.origene.com/chromatograms/ja1692_a03.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\_001042611

ORF Size: 3258 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\\_001042611.1](#), [NP\\_001036076.1](#)

RefSeq Size: 4564 bp

RefSeq ORF: 3261 bp

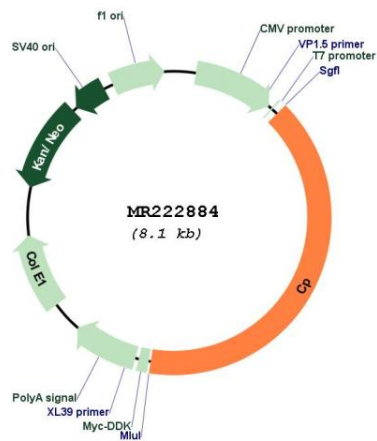
Locus ID: 12870

**Cytogenetics:** 3 A2

**MW:** 167.3 kDa

**Gene Summary:** The protein encoded by this gene is a copper-containing glycoprotein found soluble in the serum and GPI-anchored in other tissues. It oxidizes Fe(II) to Fe(III) and is proposed to play an important role in iron homeostasis. In humans mutations of this gene cause aceruloplasminemia, which is characterized by retinal degeneration, diabetes, anemia and neurological symptoms. In mouse deficiency of this gene in combination with a deficiency of its homolog hephaestin causes retinal degeneration and serves as a pathophysiological model for aceruloplasminemia and age-related macular degeneration. Alternative splicing results in multiple transcript variants that encode different protein isoforms. [provided by RefSeq, Jan 2013]

**Product images:**



Circular map for MR222884