

Product datasheet for **MG222884**

Cp (NM_001042611) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cp (NM_001042611) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cp
Synonyms:	D3Erttd555e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222884 representing NM_001042611 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGTTTTTGCTGCTTAGCACATTTATATTTTTGTATAGTTCCTTAGCCTTGCAAGAGATAAGCATT
ATTTTCATTGGAATTACTGAAGCAGTCTGGGACTATGCTTCTGGCACTGAAGAAAAGAACTTATTTTCAGT
TGACACGGAACAGTCCAATTTCTATCTTCAAAATGGTCCAGATCGTATTGGAAGAAAATATAAGAAGGCC
CTTTATTTTGGTACACAGATGGCACCTTTAGTAAGACTATAGACAAACCAGCCTGGCTAGGGTTTTTATG
GCCCTGTCATCAAAGCTGAAGTTGAAGATAAAGTTTATGTTCACTTAAAGAACCTTGCCCTAGGATCTA
CACTTTTCATGCACATGGGGTAACGTACACCAAGGAGTATGAGGGAGCCGCTACCTGACAACACCACT
GATTTTCAACGGGCTGATGACAAAGTGCTCCCGACAACAGTATGTGTATGTGCTGCATGCCAATGAGC
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TATTGCATCAGGACTCATAGGACCTCTAACTCTGTAAAAAGGTTCTCTATATAAGGAAAAAGAGAAA
AATATTGACCAAGAATTTGTAATAATGTTCTGTGGTGGATGAAAACTCAGCTGGTATCTGGAAGATA
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GATGTACTCTATAAATGGATATACATTTGGAAGCCTCCAGGGCTCTCGATGTGTGCAGCAGACAGAGTG
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GGCCACCAGGTCGCTCCTCACAGCAAGCAGCCTCCCATGTGGCTCCCAAAGAAACCTTTACATACGAAT
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 GTTTTACCAGTAGAACAAGTATCATCTCAGAGTTACAGGATGACCTGGAACATCCTCTATACACTACTAA
 TCAGCATCATTATTTTATTCAAATGTCTACCAAGGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG222884 representing NM_001042611
 Red=Cloning site Green=Tags(s)

MKFLLLSTFIFLYSSLALARDKHIFIGITEAVWDYASGTEEKKLISVDTEQSNFYLQNGPDRIGRKYKKA
 LYFEYTDGTFSTIDKPAWLGFLGPVIAEVEDKVVVHLKNLASRIYTFHAHGVTYTKEYEGAVYPDNTT
 DFQRADDKVLPQQYVYVLANEPSPGEGDSNCVTRIIYHSHVDAPKDIASGLIGPLILCKKGSLEYKEKEK
 NIDQEFVLMFVVDENLSWYLEDNIKTFCEPEKVDKDNEDFQESNRMYSINGYTFGSLPGLSMCAADR
 KWYLFMGNEVDVHSAFFHGQALTSRNYQTDIINLFPATLIDAYMVAQNPVWMLSCQNLNHLKAGLQAF
 FQVRDCNKPSPEDNIQDRHVRHYIIAAEEVIWNYAPSGTDIFTGENLTALESDSRVFFEQGATRIGGSYK
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 TGGMKQKYTVNQCRQFEDFTVYL GERTYYVA AVEVEWDYSPSRAWEKELHHLQE QNVSNVFLDKEEFFI
 GSKYKVVYRQF TDSSFREQVKRAEDEHLGILGPIIHANVGDVKVVFKNMATRPYSIHAHGKTESST
 VVPTLPGEVRTYTWQIPERSGAGREDSACIPWAYYSTVDRVKDLYSGLIGPLIVCRKSYVKVFSPPKKME
 FFLFLVFDENESWYLDNIKTYSEHPEKVNKDNEEFLESNMHAINGKMFNLQGLTMHVKDEVNWWYVM
 GMGNEIDLHTVHFHGHFSQYKHRGVYSSDVDFLFPGTYTLEMFPQTPGTWLLHCHVTDHVVHAGMATTYT
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TRTRPLE - GFP Tag - V

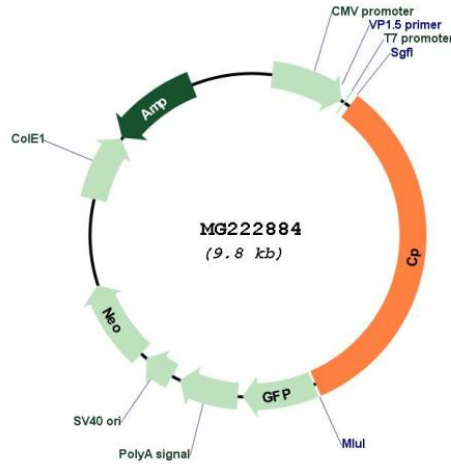
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



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:	<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_001042611.1, NP_001036076.1</u>
RefSeq Size:	4564 bp
RefSeq ORF:	3261 bp
Locus ID:	12870
Cytogenetics:	3 A2
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]