

## Product datasheet for **MC229349**

### Cp (NM\_001276248) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cp (NM\_001276248) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Cp  
**Synonyms:** D3Ertd555; D3Ertd555e  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC229349 representing NM\_001276248  
**Red**=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGAAGTTTTGCTGCTTAGCACATTTATATTTTTGTATAGTTCCTTAGCCTTGCAAGAGATAAGCATT  
ATTTTCATTGGAATTACTGAAGCAGTCTGGGACTATGCTTCTGGCACTGAAGAAAAGAACTTATTTTCAGT  
TGACACGGAACAGTCCAATTTCTATCTTCAAAATGGTCCAGATCGTATTGGAAGAAAATATAAGAAGGCC  
CTTTATTTTGGAGTACACAGATGGCACCTTAGTAAAGACTATAGACAAACAGCCTGGCTAGGGTTTTTAG  
GCCCTGTCATCAAAGCTGAAGTTGAAGATAAAAGTTTATGTTCACTTAAAGAACCTTGCCCTAGGATCTA  
CACTTTTCATGCACATGGGGTAACGTACACCAAGGAGTATGAGGGAGCCGCTACCCCTGACAACACCACT  
GATTTTCAACGGGCTGATGACAAAGTGCTTCCCGACAACAGTATGTGTATGTGCTGCATGCCAATGAGC  
CAAGTCTGGAGAGGGAGACAGCAATTGTGTGACCAGGATTTACCACTCCCATGTTGATGCTCCAAAAGA  
TATTGCATCAGGACTCATAGGACCTCTAATACTCTGTAAGAAAGTTCTCTATATAAGGAAAAAGAGAAA  
AATATTGACCAAGAATTTGTACTAATGTTCTCTGTGGTGGATGAAAATCTCAGCTGGTATCTGGAAGATA  
ACATCAAACCTTCTGCTCTGAACCCGAGAAAGTTGATAAGACAATGAAGACTTCCAGGAAAGCAACAG  
GATGTAATCTATAAATGGATATACATTTGGAAGCCTCCAGGGCTCTCGATGTGTGCAGCAGACAGAGTG  
AAGTGGTACCTTTTTGGTATGGTAATGAAGTTGATGTGCATTCAGCTTTCTTTCATGGCCAAGCCCTGA  
CCAGCAGGAACATCAAACCGATATAATCAACCTGTTCCCTGCCACCCTAATTGATGCTTATATGGTGGC  
CCAGAATCCTGGAGTCTGGATGCTCAGTTGCCAGAACCTAAACCATCTGAAAGCTGGGTTGCAGGCCCTT  
TTCCAGGTTCTGACTGTAACAAGCCCTCGCCAGAGGATAATATCCAAGATAGGCATGTGAGACACTATT  
ACATTGCTGCTGAGGAGTCTGGAATTATGCTCCTTCTGGGACGGACATCTTCACTGGAGAGAATTT  
AACAGCTCTGAAAGTGATTCAAGGGTATTTTTGAGCAAGGTGCCACAAGAATTGGTGGCTCTTATAAA  
AAAATGGCATATCGTGAGTACACAGATGGTTCCCTCACAACCGAAAACAAGAGGCCCTGATGAGGAAC  
ATCTTGAATCCTAGGTCTGTCAATTTGGCAGAAAGTAGGAGACACCATTAAGTACCTTTCATAACAA  
AGGACAGCATCCTCTCAGCATTAGCCAATGGGAGTAAGTTTCACTGCAGAAAATGAGGGAACATACTAT  
GGCCACCAGGTCGCTCCTCACAGCAAGCCTCCCATGTGGCTCCCAAAGAAACCTTTACATACGAATGGA



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CTGTCCCAAGAAATGGGACCCACTTATGCAGATCCTGTGTGCCTATCTAAGATGTACTACTCTGGCGT
TGACCCCAACAAAGATATATTTACTGGGCTTATTGGGCAATGAAAATATGCAAGAAAGGCAGCTTACTT
GCTGATGGGAGACAGAAAGATGTAGACAAAGAGTTCTACTTGTTCACACAGTGTGGATGAGAATGAGA
GTTTACTCTTAGATGATAATATCAGGATGTTCACAACTGCACCTGATCAAGTGGATAAGGAAGATGAAGA
CTTTCAGGAGTCTAATAAGATGCACTCCATGAATGGGTTTCATGTATGGCAATCAGCCTGGCCTCAATATG
TGCTAGGAGAATCCATCGTGTGGTATTTGTTTCAGCGCTGGAAATGAGGCTGATGTGCATGGGATATACT
TTTCAGGAAATACTTATCTGTCTAAAGGAGAAAGAGACACTGCAAACCTATTCCTCATAAAAGTCT
CACCCCTTCTCATGAACCCTGACACAAAAGGGACTTTTGTGTTGAGTGCCTTACAACGGATCACTACACA
GGTGGCATGAAGCAAAAATACACTGTGAACCAGTGCCAGCGGCAGTTTGAAGATTTCACTGTCTACCTTG
GAGAAAGGACCTACTATGTGGCAGCCGTAGAGGTGGAATGGGATTACTACCAAGCAGGGCCTGGGAAAA
GGAGCTGCATCATTTGCAAGAGCAAAAATGTTTCAAATGTATTTTGGATAAAGAAGATTTTTCATAGGC
TCAAAGTACAAGAAGTTGTGTATCGCCAGTTTACTGACAGCTCATTAGAGAACAGGTGAAGAGACGAG
CCGAAAGACGAGCACTTGGGCATCCTTGGCCACCAATTCATGCAAATGTTGGAGACAAAGTTAAAGTTGT
CTTTAAAAATATGGCAACCAGGCCATATCAATACATGCCATGGGGTAAAACAGAGAGTTCTACAGTT
GTTCCAACGTTACCAGGTGAAGTTCGAACTTATACATGGCAAATCCAGAAAGATCAGGGCTGGAAGAG
AGGATTACGTTGTATCCATGGGCTTATTACTCAACTGTGGATCGAGTTAAGGATCTCTATAGTGGGCT
AATAGGCCATTGATTGTTTGTGCGAAGTCTTATGTGAAAGTATTCAGTCTAAAAGAAAATGGAGTTT
TTCTTCTGTTTCTAGTATTTGATGAGAATGAATCTTGGTACTTAGATGATAACATCAAAACATACTCTG
AACCCCTGAGAAAGTAAACAAAGACAACGAGGAATTCCTAGAAAGCAATAAAATGCATGCTATTAATGG
GAAAATGTTTGGAAACCTACAAGGCCTACAATGCACGTGAAAGATGAAGTCAACTGGTATGTGATGGGA
ATGGGCAATGAAATAGACCTGCACACTGTACACTCCACGGCCACAGTTCCAATACAAGCACAGGGGAG
TATACAGTTCTGATGTCTTTGACCTTTCCCTGGAACATACCAAACCTAGAAAATGTTTCCCAACACC
TGAACCTGGTTACTCCACTGCCAGTACTGACCATGTCCATGCTGGGATGGCAACTACCTACACTGTT
TTACAGTAGAACAAAGTATCATCTCAGAGTTACAGGATGACCTGGAACATCCTCTATACACTACTAATCA
GCATCATTATTTTATTCCAAATGTCTACCAAGGAGTAG
    
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_001276248
- Insert Size:** 3258 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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\\_001276248.1](#), [NP\\_001263177.1](#)

RefSeq Size: 4561 bp

RefSeq ORF: 3258 bp

Locus ID: 12870

UniProt ID: [Q61147](#)

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]

Transcript Variant: This variant (3) uses an alternate, in-frame acceptor splice site as well as an alternate 3' exon structure, compared to variant 2. It encodes isoform c which is longer and has a distinct C-terminus, compared to isoform b. Both variants 3 and 4 encode the same isoform (c).