

Product datasheet for **MC216523**

Mfsd12 (NM_028657) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mfsd12 (NM_028657) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Mfsd12
Synonyms:	C19orf28; F630110N24Rik; gr; Wdt1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC216523 representing NM_028657
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCGCCTCCGTGCGACGACGAGGCCCGGGGCCCGCGGACGCTGTCCCTCGCCGCGGGCTGAGCT
 TCGCGGTGCGCCACTTCCCTCAACGACCTGTGCGCCGGCATGTGGTTCACCTACCTGCTACTATTCCTGCA
 CTCGTGCGCGGGTACAGCTCGCGGGGCGCGGGCTGCTGCTGCTGCTGGGCAAGTGGCCGACGGGCTC
 TGCACGCCGCTCGTGGGCTACGAGGCGGACCGCGCCTCCTGCGTGCCTGTGGGCCCCGAAAGCCTGGC
 ACCTAGCGGGCACTGTCTGTGCTCCTCTCCTCCCGTTCATCTTACGCCCGTGCCTGGGCTGCGGGGA
 AGCCACGCTGAATGGGCTGCCTTGCTGTACTATGGACCCTTCATTGTGCTCTTCCAGTTTGGTGGGCT
 GCCACGCAGATTGCCACCTGAGCCTCATCCAGAGCTGGTGACCAGTGACCACGAGAAGTGGAGCTCA
 CGGCCCTCAGGTATGCGTTCAGTGTGGTGGCTAACATCACCGTGTACGGCGCAGCCTGGTGTGCTGCA
 CTTGCAGGGCTCTGCACACGGCGAGCAGGACATCAGTGTGGGTGACCAGTAGGAGTCCAGGATGTGCC
 GTTTCCGGAACCTGGCCCTGCTTGTGGTGGGTGTGGGAGCCATCTTCTCTGCTCTTCCACTTGGGTA
 CCAAGGAGGGCCACAGTCCCAGCACTGGGGAAACGAACCAATGAGCACACCCCTGGTGGCCCCAGC
 GGCCAGCCACTGCTGTGTGAAACACTGGCTTCGGGAGCCAGCTTTTTATCAGGTAGGCATGCTGTAC
 ATGACCACAAGGCTCATTGTGAACCTGTCTCAGACCTACATTGCCATGTACCTGACCTATTCTCTCAGCT
 TGCCCAAGAAGTTCATCGCCACCATCCCCCTGGTGTACTTGGTGGCTTCTTCTCTTCTCTCCTCAT
 GAAGCCAGTCAACCGCGCATAGGGAGGAATATGACCTACTTACCGGGCTGCTGGTGTACCTGGCCTTC
 GCAGCTTGGGTGGCCCTGGCAGATAATCTGGGTGTGGCCGTGTACGGGGTGCAGTGTCTAGGTGCAG
 GCTGTGCCACCATCCTTGTACCTCCCTAGCCATGACAGCTGACCTCATTGGCCACACGCACAGTGG
 AGCCTTCGTGTATGGTGTATGAGCTTTTCGGATAAAGGTGGCCAACGGACTGGCAGTCATGGCTGTGAG
 AGCCTGCATCCCTGTCCCTCTGAGCTGTGCTGTGGGGCCTGCATCAGCTTCTACCACTGGGTGATGACAG
 CAGTGACAGGGCGGTGGGTGTGGCCGCGGCTCTGGCTCTCTGCAGCCTCCTCATCTGGCCATCCGCAT
 TCGCAACCGGGACCCGCGAGACCGGCCT**TGA**

ACCGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_028657

Insert Size: 1431 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).

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_028657.3](#), [NP_082933.2](#)

RefSeq Size: 1702 bp

RefSeq ORF: 1431 bp

Locus ID: 73822

UniProt ID: [Q3U481](#)

Cytogenetics: 10 C1

Gene Summary: Transporter that mediates the import of cysteine into melanosomes, thereby regulating skin/hair pigmentation (PubMed:33208952). In melanosomes, cysteine import is required both for normal levels of cystine, the oxidized dimer of cysteine, and provide cysteine for the production of the cysteinyl dopas used in pheomelanin synthesis, thereby regulating skin/hair pigmentation (PubMed:33208952). Also catalyzes import of cysteine into lysosomes in non-pigmented cells (By similarity).[UniProtKB/Swiss-Prot Function]