

Product datasheet for SC315543

MOCS1 (NM_001075098) Human Untagged Clone

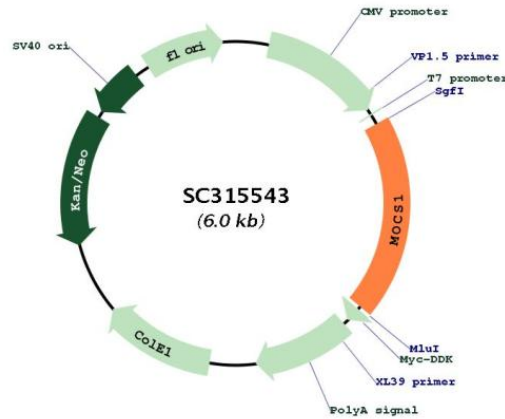
Product data:

Product Type: Expression Plasmids
Product Name: MOCS1 (NM_001075098) Human Untagged Clone
Tag: Tag Free
Symbol: MOCS1
Synonyms: MIG11; MOCOD; MOCS1A; MOCS1B
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >SC315543 representing NM_001075098.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTGTAGTGAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCGGCGCGGCCACTGTCCGGATGCTGCGCGGCTTCTGAGGTCCAGCGCCCGGAGCTGCAGCTCA
GGGGCTCCGGTGACCCAGCCCTGCCCGGGGAGTCCGCGCGAGCTGCCTCGGAGGAGGTGTCCAGGCGG
AGGCAGTTCCTGCGGGAGCATGCGGCCCTTCTCCGCTTCTCACAGACAGCTTCGGCCGGCAGCAC
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CGGCTACTGCCCCAGCTTCAAGAGGCTGGTCTCAGTGCCATCAACATCAGCCTGGACACCCTGGTGCCT
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ACAAGTGAACCTCAAGAAGATGGTCAGCTATAAGGAGATGTAGACTGTCCGGCAGCAGTGGCCA
GAGCTGGAGAAGGTGCCAGAGGAGGAATCCAGCACAGCCAAGGCCTTTAAATCCCTGGCTTCCAAGGC
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GCCTCTGAGCAGGAGCTGCTGAGAATCATTGGGCTGCTGTGGCAGGAAGAAGCGGCAGCATGCAGGC
ATGTTTCAGTATTTCCAGATGAAGAACCGCCCATGATCCTCATCGGTGGGTGA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
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Restriction Sites: SgfI-MluI



Plasmid Map:


ACCN: NM_001075098

Insert Size: 1158 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: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001075098.3](#)

RefSeq Size: 4159 bp

RefSeq ORF: 1158 bp

Locus ID: 4337

UniProt ID: [Q9NZB8](#)

Cytogenetics: 6p21.2

MW: 43.1 kDa

Gene Summary: Molybdenum cofactor biosynthesis is a conserved pathway leading to the biological activation of molybdenum. The protein encoded by this gene is involved in this pathway. This gene was originally thought to produce a bicistronic mRNA with the potential to produce two proteins (MOCS1A and MOCS1B) from adjacent open reading frames. However, only the first open reading frame (MOCS1A) has been found to encode a protein from the putative bicistronic mRNA, whereas additional splice variants are likely to produce a fusion between the two open reading frames. This gene is defective in patients with molybdenum cofactor deficiency, type A. A related pseudogene has been identified on chromosome 16. [provided by RefSeq, Nov 2017]

Transcript Variant: This variant (4) contains a distinct 5' UTR and 5' coding region, compared to variant 1, resulting in an isoform (4) that is the same length but has a distinct N-terminus, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.