

Product datasheet for **RG217033**

MOCs1 (NM_001075098) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	MOCs1
Synonyms:	MIG11; MOCOD; MOCs1A; MOCs1B
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG217033 representing NM_001075098
Red=Cloning site Blue=ORF Green=Tags(s)

TTTGTGAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCGCGGCCCACTGTCCCGGATGCTGCGGCGGCTTCTGAGGTCCAGCGCCCGGAGCTGCAGCTCAG
GGGCTCCGGTGACCCAGCCCTGCCCGGGGAGTCCGCGCGAGCTGCCTCGGAGGAGGTGTCCAGGCGGAG
GCAGTTCCTGCGGGAGCATGCGGCCCTTCTCCGCCCTCCTCACAGACAGCTTCGGCCGGCAGCACAGC
TACCTGCGGATCTCCCTCACAGAGAAGTGAACCTCAGATGTCAGTACTGCATGCCCGAGGAGGGGTCC
CGCTGACCCCAAGCCAACCTGCTGACCACAGAGGAGATCCTGACCCTCGCCCGGCTCTTTGTGAAGGA
AGGCATCGACAAGATCCGGCTCACAGGTGGAGAGCCGCTTATCCGGCCGGACGTGGTGGACATTGTGGCC
CAGCTCCAGCGGCTGGAAGGGCTGAGAACCATAGGTGTTACCACCAATGGCATCAACCTGGCCCGGCTAC
TGCCCCAGCTTCAGAAGGCTGGTCTCAGTGCCATCAACATCAGCCTGGACACCTGGTGCCTGCCAAGTT
TGAGTTCATTGTCCGAGGAAAGGCTTCCACAAGGTATGGAGGGCATCCACAAGGCCATCGAGCTGGGC
TACAACCTGTGAAGGTGAACCTGTGTGGTATGCGAGGCCCTAACGAGGATGAACCTCTGGAAGTTGCGG
CCTTGACTGAGGGCCTCCCTGGATGTGCGCTTATAGAGTATATGCCCTTTGATGGCAACAAGTGGA
CTTCAAGAAGATGGTCAGCTATAAGGAGATGCTAGACACTGTCCGCGCAGAGTGCCAGAGCTGGAGAAG
GTGCCAGAGGAGGAATCCAGCACAGCCAAGGCCCTTAAATCCCTGGCTTCAAGGCCAGATCAGCTTCA
TCACATCCATGTCTGAGCATTCTGTGGGACCTGCAACCGCCTGCGAATCACAGCTGATGGGAACCTCAA
GGTCTGCCTCTTTGAAACTCTGAGGTATCCCTGCGGGATCACCTGCGAGCTGGGCGCTCTGAGCAGGAG
CTGCTGAGAATCATTGGGGCTGCTGTGGGAGGAAGCGGCAGCATGCAGGCATGTTCAAGTATTTCC
AGATGAAGAACCGGCCATGATCCTCATCGGTGGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA



Protein Sequence: >RG217033 representing NM_001075098
Red=Cloning site Green=Tags(s)

MAARPLSRMLRRLRSSARSCSSGAPVTQPCPGESARAASEEVSRRRQFLREHAAPFSAFLTDSFGRQHS
YLRISLTEKCNLRQCYCMPEEGVPLTPKANLLTTEEILTLARLFVKEGIDKIRLTGGEPLIRPDVVDIVA
QLQRLEGLRTIGVTTNGINLARLLPQLQKAGLSAINISLDTLVPKFEFIVRRKGFKVMEGIHKAIELG
YNPVKVNCVVMRGLNEDELLDFAALTEGLPLDVRFIEYMPFDGNKWNFKKMVSYPEMLDTRVQWPELEK
VPEEESSTAKAFKIPGFQGIISFITSMEHFCGTCNRLRITADGNLKVCLFGNSEVSLRDHLRAGASEQE
LLRIIGAAGVGRKKRQHAGMFSISQMKNRPMILIGG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001075098

ORF Size: 1155 bp

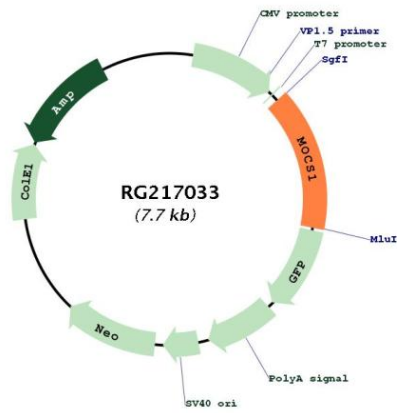
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001075098.4</u>
RefSeq Size:	3027 bp
RefSeq ORF:	1158 bp
Locus ID:	4337
UniProt ID:	<u>Q9NZB8</u>
Cytogenetics:	6p21.2
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]

Product images:



Circular map for RG217033