

Product datasheet for **MG215949**

Mocs1 (NM_020042) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mocs1 (NM_020042) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mocs1
Synonyms:	3110045D15Rik; AI043170; AW536397
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG215949 representing NM_020042
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGCGCGGCTGCGTTTCGGAATAGTGGCGAGCTCCTGAGGTCCAATGCTCGGGTTGACGCTCGG
 GGGCTCCGGTGACGCAGCCTCGCCCCGGGAGCCCTCGAGACCTACCAGGGAGGGCTGTCCCTGAGGCT
 CCAGTTCCTCCAGGAGCATGCGGCTCCCTTCTCTGCCTTCTCACGGACAGCTTTGGCCGACAACATAGT
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 GTGCAAGGCAGTACGAGGGACATTGTGGTGCAGAGGTGAAGCTCATTAGTAAGACTGGAGGGCAGCGG
 GGAGACTTCCATCGGGCT

ACGCGTACGCGGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG215949 representing NM_020042
 Red=Cloning site Green=Tags(s)

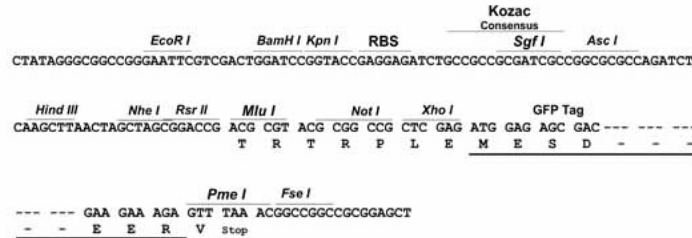
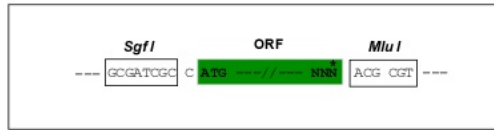
MAARPAFGIVRQLLRNARGCSSGAPVTQPRPGEPSRPTREGLSLRLQFLQEHAAPFSAFLTDSFGRQHS
 YLRISL TEKCNLRQYCMPEEGVPLTPKADLLTTEEILTLARLFVKEGVDKIRLTGGEPLIRPDVVDIVA
 RLHGLEGLRTIGLTTNGINLARLLPRLQQAGLNAVNISLDTLVPKFEFIVRRKGFHKVMEGIHKAIELG
 YKPVKNCVVMRGLNEDELLDFVALTEGLPLDVRFIEYMPFDGNKWNFKKMVSYPEMLDIRQRWPLEK
 LPEEDSSTAKAFKIPGFQGI SFITSMSEHFCGTCNRLRITADGNLKVCLFGNSEVSLRDHLRAGASEEE
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 ASLWKRHCIPKALPLSQQLGSGSPQRHYSSYPDPDTHSKCLSTGSQAPDAPSGPGPTSNTLTHVDSAGR
 ASMVDVGGKPEPETERVAVASAMVLLGPVAFKLVQQNQLKKGDALVVAQLAGVQAAKLTSQLIPLCHHVALS
 HVQVHLELDSTRHAVLIQASCRARGPTGVEMEAL TSAAMAALTVYDMCKAVSRDIVVTEVKLISKTGQGR
 GDFHRA

TRTRPLE – GFP Tag – V

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_020042

ORF Size: 1908 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.

RefSeq: [NM_020042.2](#), [NP_064426.2](#)

RefSeq Size: 2640 bp

RefSeq ORF: 1911 bp

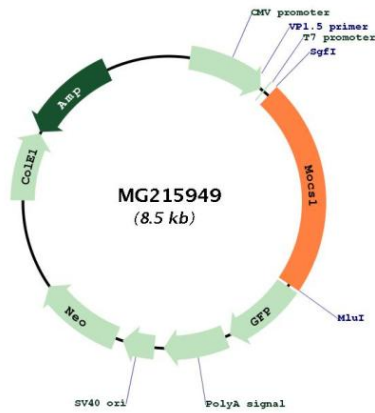
Locus ID: 56738

UniProt ID: [Q5RKZ7](#)

Cytogenetics: 17 C

Gene Summary: Isoform Mocs1a and isoform Mocs1b probably form a complex that catalyzes the conversion of 5'-GTP to cyclic pyranopterin monophosphate (cPMP). Mocs1a catalyzes the cyclization of GTP to (8S)-3',8-cyclo-7,8-dihydroguanosine 5'-triphosphate and Mocs1b catalyzes the subsequent conversion of (8S)-3',8-cyclo-7,8-dihydroguanosine 5'-triphosphate to cPMP. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG215949