

Product datasheet for MR215917

Mocs1 (NM_028464) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mocs1 (NM_028464) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mocs1
Synonyms:	3110045D15Rik; AI043170; AW536397
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR215917 representing NM_028464 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGCGCGCGGCTGCGTTCCGAATAGTGCAGCTCCTGAGGTCCAATGCTCGGGTTGCAGCTCGG
GGGCTCCGGTGACGCAGCCTCGCCCCGGGGAGCCCTCGAGACCTACCAGGGAGGGCTGTCCCTGAGGCT
CCAGTTCCTCCAGGAGCATGCGGCTCCCTTCTCTGCCTCCTCACGGACAGCTTTGGCCGACAACATAGT
TACCTGCGGATCTCTCACAGAGAAGTCAACCTCCGATGCCAGTATTGCATGCCGAGGAGGGTGTGC
CCCTGACCCCAAAGCTGACCTACTGACCACAGAGGAGATCCTGACCCTTGCCCGCTCTTTGTGAAGGA
AGGTGTGACAAGATCCGTCTCACTGGTGGGAGCCTCTCATCCGACCGGATGTGGTGGACATCGTGCC
AGACTTATGCGGCTGGAAGGGCTGAGAACCATCGGCCTACCACCAACGGCATCAACCTAGCCCGGCTGC
TGCCCCGACTTCAGCAAGCAGGGCTCAATGCTGTTAATCAGCCTGGACTCTGGTCCCGCCAAGTT
TGAGTTCATCGTCCGAGAAAAGGCTTCCACAAGGTTATGGAGGGTATCCACAAAGCCATCGAGCTGGGT
TACAAGCCTGTGAAGGTGAAGTGTGGTGTGCGAGGCTGAATGAAGACGAGCTGTGGACTTCTGTG
CCCTGACAGAGGGCTTCCCTTGGACGTGCGCTTATTGAGTACATGCCATTTGACGGCAACAAGTGAA
CTTCAAGAAGATGGTTAGCTACAAGGAGATGCTGGACACCATCCGACAGCGGTGGCCAGGGCTGGAGAAG
CTGCCGGAGGAGACTCGAGCACTGCCAAGGCCTTTAAGATCCCTGGCTTCCAGGTTCAGATCAGCTTCA
TCACATCCATGTCAGAGCATTTCTGTGGGACCTGCAACCGGTTGCGCATCACAGCTGATGGGAACCTCAA
GGTCTGCCTCTTTGGAACTCTGAGGTGTCACTGCGGGACCACCTGCGGGCGGGGCTCTGAGGAGGAG
CTGCTGAGAATCATTGGGGCCGAGTGGGTAGGAAGAAGCGGCAGCACGCAGGCATGTTCAATATTGCC
AGATGAAGAACCAGCCATGATCCTCATCGGTGGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR215917 representing NM_028464
 Red=Cloning site Green=Tags(s)

MAARPAFGIVRQLLSNARGCSSGAPVTQPRPGEPSRPTREGLSLRLQFLQEHAAPFSAFLTDSFGRQHS
 YLRISL TEKCNLRQCYCMPEEGVPLTPKADLLTTEEILTLARL FVKEGVDKIRL TGGEPLIRPDVVDIVA
 RLHGLEGLRTIGLTTNGINLARLLPRLQQAGLNAVNISLDTL VPAKFEFIVRRKGFHKVMIEGIIHKAIELG
 YKPVKVNVCVVMRGLNEDELLDFVALTEGLPLDVRFIEYMPFDGNKWNFKKMVSYKEMLDITRQRWPLEK
 LPEEDSSTAKAFKIPGFQGISFITSMEHF CGTCNRLRITADGNLKVCLFGNSEVSLRDHLRAGASEEE
 LLRIIGAAVGRKKRQHAGMFNIAQMKNRPMILIGG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_028464

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.

RefSeq: [NM_028464.1](#), [NP_082740.1](#)

RefSeq Size: 2655 bp

RefSeq ORF: 1158 bp

Locus ID: 56738

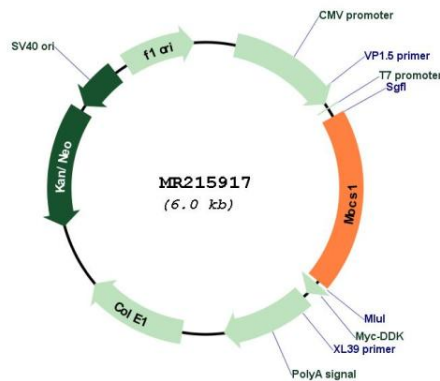
UniProt ID: [Q5RKZ7](#)

Cytogenetics: 17 C

MW: 43.4 kDa

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 MR215917