

Product datasheet for **RG201668**

MCM5 (NM_006739) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCM5 (NM_006739) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MCM5
Synonyms:	CDC46; MGORS8; P1-CDC46
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG201668 representing NM_006739
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCGGGATTCGACGATCCTGGCATTCTACAGCGACAGCTTCGGGGGCGACGCCAGGCCGACGAGG
 GGCAGGCCCGCAAATCGCAGCTGCAGAGGCGCTTCAAGGAGTTCCCTGCGGCAGTACCGAGTGGCACCGA
 CCGCACGGGCTTCACTTCAAATACAGGGATGAACTCAAGCGGCATTACAACCTGGGGGAGTACTGGATT
 GAGGTGGAGATGGAGGATCTGGCCAGCTTTGATGAGGACCTGGCCGACTACTTGTACAAGCAGCCAGCCG
 AGCACCTCGAGCTGCTGGAGGAAGCTGCCAAGGAGGTAGCTGATGAGGTGACCCGGCCCCGGCTTCTGG
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 CCGGTACCCTGTGAGGGTGGAGGGCTTACCAGCCAGGAGGACCAGGAGATGCTGAGCCGCATCGAGAA
 GCAGCTCAAGCGCCGCTTTGCCATTGGCTCCCAGGTGTCTGAGCACAGCATCATCAAGGACTTACCAAG
 CAGAAATACCCGGAGCACGCCATCCACAAGGTGCTGCAGCTCATGCTGCGGCGCGGCGAGATCCAGCATC
 GCATGCAGCGCAAGTTCTTACCGCTCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG201668 representing NM_006739
 Red=Cloning site Green=Tags(s)

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MSGFDDPGIFYSDFSFGGDAQADEGQARKSQLQRRFKEFLRQYRVGTDRTGFTFKYRDELKRHYNLGEYWI
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KSDMMSHLVKIPGIIIAASAVRAKATRISIQCRSCRNLTNIAMRPGLEGYALPRKCNTDQAGRPKCPLD
PYFIMPDKCKCVDFQTLKQLQELPDAVPHGEMPRHMQLYCDRYLCKVVPGNRVTIMGIYSIKKFGLTTSR
GRDRVGVGIRSSYIRVLGIQVDTDGSGRSFAGAVSPQEEEEFRRLAALPNVYEVISKSIAPSI FGGTDMK
KAIACLLFGGSRKRLPDGLTRRGDINLLMLGDPGTAKSQLLKVFVEKCSPIGVYTSKGSSAAGLTASVMR
DPSSRNFIIEGGAMVLADGGVVCIDFDMREDDRVAIHEAMEQQTISIAGITTTLSRCSVLAANS
VFGRWDETKGEDNIDFMPTILSRFDMFIVKDEHNEERDVMLAKHVITLHVSALTQTQAVEGEIDLAKLK
KFIAYCRVKCGPRLSAEAAEKLKNRYIIMRSGARQHERSDRRSSIPITVRQLEAIVRIAEALSKMKLQP
FATEADVEEALRLFQVSTLDAALSGTSGVEGFTSQEDQEMLSRIEKQLKRRFAIGSQVSEHSIIKDFTK
QKYPEHAHKKVLQLMLRRGEIQHRMQRKVLRYLKL
  
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006739

ORF Size: 2202 bp

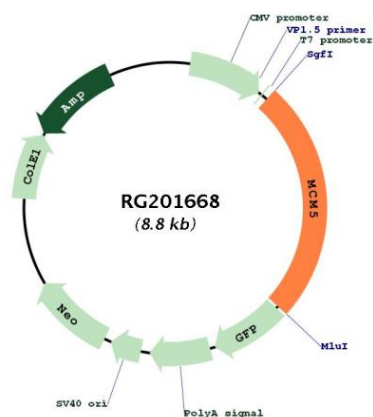
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<ol style="list-style-type: none">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_006739.2 , NP_006730.2
RefSeq Size:	2548 bp
RefSeq ORF:	2205 bp
Locus ID:	4174
UniProt ID:	P33992
Cytogenetics:	22q12.3
Domains:	MCM
Protein Families:	Stem cell - Pluripotency, Transcription Factors
Protein Pathways:	Cell cycle, DNA replication
Gene Summary:	The protein encoded by this gene is structurally very similar to the CDC46 protein from <i>S. cerevisiae</i> , a protein involved in the initiation of DNA replication. The encoded protein is a member of the MCM family of chromatin-binding proteins and can interact with at least two other members of this family. The encoded protein is upregulated in the transition from the G0 to G1/S phase of the cell cycle and may actively participate in cell cycle regulation. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG201668