

Product datasheet for **RG213809**

MCM7 (NM_005916) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCM7 (NM_005916) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MCM7
Synonyms:	CDC47; MCM2; P1.1-MCM3; P1CDC47; P85MCM; PNAS146; PPP1R104
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG213809 representing NM_005916
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCACTGAAGGACTACGCGCTAGAGAAGGAAAAGTTAAGAAGTTCTTACAAGAGTTCTACCAGGATG
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 CTCAGAGACCAGCAGATGTGATTTGCCACCGTCCGTGAACTGGTCTCAGGGGGCCGAAGTGTCCGGTT
 CTCTGAGGCGAGCAGCGCTGTGATCTCGTGGCTTACACCCGCCAGTTCCAGGCGGCTCTGGATGAA
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

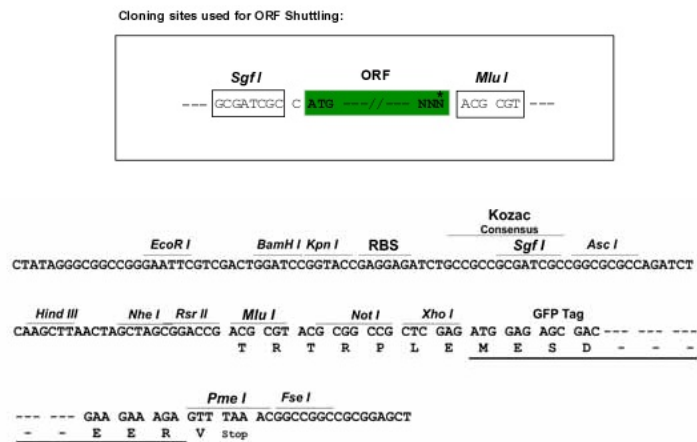
Protein Sequence: >RG213809 representing NM_005916
 Red=Cloning site Green=Tags(s)

MALKDYALEKEKVKKFLQEFYQDDELGKKQFKYGNQLVRLAHREQVALYVDLDDVAEDDPELVDSICENARRYAKLFADAVQELLPQYKEREVVKNDVLDVYIEHRLMMEQRSRDPGMVRSPQNQYPAELMRRFELYFQG PSSNKPRVIREVRADSVGKLVTVRGIVTRVSEVKPKMVVATYTCDCQGAETYQPIQSPTFMPLIMCPSQE CQTNRSRGGRLYLQTRGSRFIKFQEMKMQEHSQVPGVNI PRSITVLVEGENTRIAQPGDHVSVTGI FLPI LRTGFRQVVQGLLSETYLEAHRIVKMNKSEDDSGAGELTREELRQIAEEDFYEKLAASIAPEIYGHEDV KKALLLLL VGGVDQSPRGMKIRGNINICLMGDPGVAKSQLLSYIDRLAPRSQYTTGRGSSGVGLTAAVLR DSVSGELTLEGGALVLADQGVCCIDEFDKMAEADRTAIHEVMEQQTISI AKAGILTTLNARCSILAAANP AYGRYNRRSLEQNIQLPAALLSRFDLLWLIQDRPDRDNDLRLAQHITYVHQHSRQPPSQFEP LDMKLMR RYIAMCREKQPMVPESLADYITAAYVEMRREAWASKDATYTSARTLLAILRLSTALARL RMDVVEKEDV NEAIRL MEMSKDLLGDKGQTARTQRPADVIFATVREL VSGGRSVRFSEAEQRCVSRGFTPAQFQAALDE YEELNVWQVNASRTRITFV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005916

ORF Size: 2157 bp

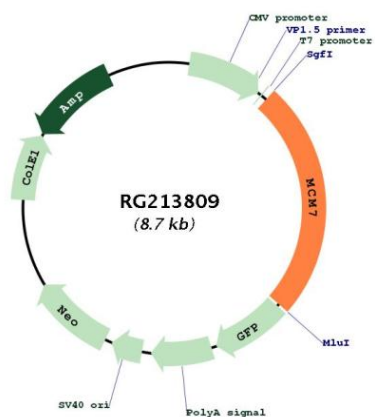
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_005916.5
RefSeq Size:	2821 bp
RefSeq ORF:	2160 bp
Locus ID:	4176
UniProt ID:	P33993
Cytogenetics:	7q22.1
Domains:	MCM, AAA
Protein Families:	Transcription Factors
Protein Pathways:	Cell cycle, DNA replication
Gene Summary:	<p>The protein encoded by this gene is one of the highly conserved mini-chromosome maintenance proteins (MCM) that are essential for the initiation of eukaryotic genome replication. The hexameric protein complex formed by the MCM proteins is a key component of the pre-replication complex (pre_RC) and may be involved in the formation of replication forks and in the recruitment of other DNA replication related proteins. The MCM complex consisting of this protein and MCM2, 4 and 6 proteins possesses DNA helicase activity, and may act as a DNA unwinding enzyme. Cyclin D1-dependent kinase, CDK4, is found to associate with this protein, and may regulate the binding of this protein with the tumorsuppressor protein RB1/RB. Alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008]</p>

Product images:



Circular map for RG213809