

Product datasheet for **SC128224**

MCM7 (NM_005916) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCM7 (NM_005916) Human Untagged Clone
Tag:	Tag Free
Symbol:	MCM7
Synonyms:	CDC47; MCM2; P1.1-MCM3; P1CDC47; P85MCM; PNAS146; PPP1R104
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC128224 sequence for NM_005916 edited (data generated by NextGen Sequencing)

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ATGGCACTGAAGGACTACGCGCTAGAGAAGGAAAAGGTTAAGAAGTTCTTACAAGAGTTC
TACCAGGATGATGAACTCGGGAAGAAGCAGTTCAAGTATGGGAACCAGTTGGTTCGGCTG
GCTCATCGGGAACAGGTGGCTCTGTATGTGGACCTGGACGACGTAGCCGAGGATGACCCC
GAGTTGGTGGACTCAATTTGTGAGAATGCCAGGCGCTACGCGAAGCTCTTTGCTGATGCC
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GTTTACATTGAGCATCGGCTAATGATGGAGCAGCGGAGTCGGGACCCTGGGATGGTCCGA
AGCCCCAGAACCAGTACCCTGCTGAACTCATGCGCAGATTTGAGCTGTATTTTCAAGGC
CCTAGCAGCAACAAGCTCGTGTGATCCGGGAAGTGCGGGCTGACTCTGTGGGAAGTTG
GTAAGTGTGCGTGAATCGTCACTCGTGTCTCTGAAGTCAAACCAAGATGGTGGTGGCC
ACTTACACTTGTGACCAGTGTGGGCAGAGACCTACCAGCCGATCCAGTCTCCACTTTC
ATGCCTCTGATCATGTGCCAAGCCAGGAGTGCCAAACCAACCGCTCAGGAGGGCGGCTG
TATCTGCAGACACGGGGCTCCAGATTCATAAATCCAGGAGATGAAGATGCAAGAACAT
AGTGATCAGGTGCCTGTGGGAAATATCCCTCGTAGTATCACGGTGTGGTGAAGGAGAG
AACACAAGGATTGCCAGCCTGGAGACCAGTCAAGCGTCACTGGTATTTTCTTGCCAATC
CTGCGCACTGGGTTCCGACAGGTGGTACAGGGTTACTCTCAGAAACCTACCTGGAGACC
CATCGGATTGTGAAGATGAACAAGAGTGAGGATGATGAGTCTGGGGCTGGAGAGCTCACC
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CACCAGCACAGCCGGCAGCCCCCTCCAGTTTGAACCTCTGGACATGAAGCTCATGAGG
CGTTACATAGCCATGTGCCGCGAGAAGCAGCCATGGTGCCAGAGTCTCTGGCTGACTAC
ATCACAGCAGCATACGTGGAGATGAGGCCGAGAGGCTTGGGCTAGTAAGGATGCCACCTAT
ACTTCTGCCCGGACCCTGCTGGCTATCCTGCGCCTTTCCACTGCTCTGGCACGTCTGAGA
ATGGTGGATGTGGTGGAGAAAGAAGATGTGAATGAAGCCATCAGGCTAATGGAGATGTCA
AAGGACTCTCTTAGGAGACAAGGGGCAGACAGCTAGGACTCAGAGACCAGCAGATGTG
ATATTTGCCACCGTCCGTGAACTGGTCTCAGGGGGCCGAAGTGTCCGGTTCTCTGAGGCA
GAGCAGCGCTGTGTATCTCGTGGCTTACACCCGCCAGTTCCAGGCGGCTCTGGATGAA
TATGAGGAGCTCAATGTCTGGCAGGTCAATGCTTCCCGGACACGGATCACTTTTGTCTGA

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Clone variation with respect to NM_005916.3
1611 c=>t

5' Read Nucleotide Sequence:	>OriGene 5' read for NM_005916 unedited TCAGTATATTTGTATACGACTCACTATAGGGCGGCCCGCAATTCGCACGAGGTGCGCTG GCCCTTTAAGAGCGATTCTCCTCCGCCCGCCAGCTCGGACCGCGGAAACCCGGCGCC TGCACTACCCCGCCGGAGATTCCTTCCGACGCCCGCACCGCTCCCGTCACTCATT TAGGCCCGCACGGTATTGGCTTGGGCTAGCGGGAGGTGAAGAAGGCCGCTTGTCCGA TTGGCCCGCACGAGTGGCGCCGGTACAGTGGGGGGCGACGTTTCGCGCAATTTGCGTT GGCCCGCCACAGTCCACCGCGCGGAGATTCTCAGCTTCCCAGGAGCAAGACCTTGAGC CCGCCAAGCGCGCCGCACGGCCCTCGGCAGCGATGGCACTGAAGGACTACGCGTAGAG AAGGAAAAGGTTAAGAAGTTCTTACAAGAGTTCTACCAGGATGATGAACTCGGGAAGAAG CAGTTCAAGTATGGGAACCAAGTTGGTTCGGCTGGCTCATCGGGAACAGGTGGCTCTGTAT GTGGACCTGGACGACGTANCCCGAGATGACCCCGAGTTGGTGGACTCAATTTGTGAGAAT GCCAGGCGCTACGCGAAGCTCTTTGCTGATGCCGTACAAGAGCTGCTGCCTCAGTCCAGG AGAGGGAAGTGTAAATAAAGATGCCTGGACGTTACATTGAGCATCGGCTATGATGGACAN NCGAGTCCAACCCTGGGATGGTCCGAGCCCCAAACCAGTACCCTGCTGAACTCTGCGCA GATTGAGCTGTATTTTCAAGGCCTAACAGCACAGCCTCGTGTGATCCGGGAGTGGCGCTG ACTTGGGGGGAAGTGGTACTGTGCGTGAATCGNACTCGTCTGAGTCAACCCAGATGG GGTGGCACCTAACTGGGACCGTGTGGGCAAACTACAGCGATCAGNTCCCTTTATGCTTT GAATGGGCAGNCAGATGCC
Restriction Sites:	NotI-NotI
ACCN:	NM_005916
Insert Size:	2650 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<u>NM_005916.3</u> , <u>NP_005907.3</u>
RefSeq Size:	2821 bp
RefSeq ORF:	2160 bp
Locus ID:	4176
UniProt ID:	<u>P33993</u>
Cytogenetics:	7q22.1
Domains:	MCM, AAA

Protein Families: Transcription Factors

Protein Pathways: Cell cycle, DNA replication

Gene Summary: 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]
Transcript Variant: This variant (1) encodes the longer isoform (1).