

Product datasheet for SC319263

MCM2 (NM_004526) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCM2 (NM_004526) Human Untagged Clone
Tag:	Tag Free
Symbol:	MCM2
Synonyms:	BM28; CCNL1; cdc19; CDCL1; D3S3194; DFNA70; MITOTIN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_004526.2
CGCGAAACCTGGTTGTTGCTGTAGTGGCGGAGAGGATCGTGGTACTGCTATGGCGGAATC
ATCGGAATCCTTACCATGGCATCCAGCCCGGCCAGCGTCGCGGAGGCAATGATCCTCT
CACCTCCAGCCCTGGCCGAAGCTCCCGGCGTACTGATGCCTCACCTCCAGCCCTGGCCG
TGACCTTCCACCATTTGAGGATGAGTCCGAGGGGCTCCTAGGCACAGAGGGGCCCTGGA
GGAAGAAGAGGATGGAGAGGAGCTCATTGGAGATGGCATGGAAAGGGACTACCGGCCAT
CCCAGAGCTGGACGCCTATGAGGCCGAGGGACTGGCTCTGGATGATGAGGACGTAGAGGA
GCTGACGGCCAGTCAGAGGGAGGCAGCAGAGCGGGCCATGCGGCAGCGTGACCGGGAGGC
TGGCCGGGCTGGGCCGCATGCGCCGTGGCTCCTGTATGACAGCGATGAGGAGGACGA
GGAGCGCCCTGCCCGCAAGCGCCGCCAGGTGGAGCGGGCCACGGAGGACGGCGAGGAGGA
CGAGGAGATGATTGAGAGCATCGAGAACCTGGAGGATCTCAAAGGCCACTCTGTGCGCGA
GTGGGTGAGCATGGCGGGCCCCGGCTGGAGATCCACCACCGCTTCAAGAACTTCTGCG
CACTCACGTGACAGCCACGGCCACAACGTCTTCAAGGAGCGCATCAGCGACATGTGCAA
AGAGAACCGTGAGAGCCTGGTGGTGAACATGAGGACTTGGCAGCCAGGGAGCACGTGCT
GGCCTACTTCTGCTGAGGCACCGGGGAGCTGCTGCAGATCTTTGATGAGGCTGCCCT
GGAGGTGGTACTGGCCATGTACCCAAAGTACGACCGCATCAACACCATCCATGTCCG
CATCTCCACCTGCCTCTGGTGGAGGAGCTGCGCTCGTGAGGCAGTGCATCTGAACCA
GGTCAAGTACAACACTGCAACAAGTGCAATTCGTCTGGGTCCTTTCTGCCAGTCCCAGAA
CCAGGAGGTGAAACCAGGCTCCTGTCTGAGTGCCAGTCCGCGGCCCTTTGAGGTCAA
CATGGAGGAGACCATCTATCAGAACTACCAAGCGTATCCGAATCCAGGAGAGTCCAGGCAA
AGTGGCGGCTGGCCGGCTGCCCGCTCCAAGGACGCCATTCTCCTCGCAGATCTGGTGA
CAGCTGCAAGCCAGGAGACGAGATAGAGCTGACTGGCATCTATCACAACAACATGATGG
CTCCCTCAACACTGCCAATGGCTTCCCTGTCTTTGCCACTGTCATCCTAGCCAACCAGT
GGCCAAGAAGGACAACAAGTTGCTGTAGGGGAACTGACCGATGAAGATGTGAAGATGAT
CACTAGCCTCTCCAAGGATCAGCAGATCGGAGAGAAGATCTTTGCCAGCATTGCTCCTTC
CATCTATGGTCATGAAGACATCAAGAGAGCCTGGCTCTGGCCCTGTTCCGAGGGGAGCC



[View online »](#)

CAAAAACCCAGGTGGCAAGCACAAAGGTACGTGGTATATCAACGTGCTCTTGTGCGGAGA
 CCCTGGCAGCAGCGAAGTCGCAGTTTCTCAAGTATATTGAGAAAGTGTCCAGCCGAGCCAT
 CTTACCACCTGGCCAGGGGGCGTCGGCTGTGGGCTCACGGCGTATGTCCAGCGGCACCC
 TGTGAGCAGGGAGTGGACCTTGGAGGCTGGGGCCCTGGTTCTGGCTGACCCAGGAGTGTG
 TCTCATTGATGAATTTGACAAGATGAATGACCAGGACAGAACCAGCATCCATGAGGCCAT
 GGAGCAACAGAGCATCTCCATCTCGAAGGCTGGCATCGTACCTCCCTGCAGGCTCGTG
 CACGGTCATTGCTGCCGCAACCCCATAGGAGGGCGCTACGACCCCTCGTGACTTTCTC
 TGAGAACGTGGACCTCACAGAGCCATCATCTCACGCTTTGACATCCTGTGTGTGGTGAG
 GGACACCGTGGACCCAGTCCAGGACGAGATGCTGGCCCGCTTCGTGGTGGCAGCCACGT
 CAGACACCACCCAGCAACAAGGAGGAGGGGCTGGCCAATGGCAGCGCTGCTGAGCC
 CGCCATGCCCAACACGTATGGCGTGGAGCCCTGCCCCAGGAGTCTGAAGAAGTACAT
 CATCTACGCCAAGGAGAGGGTCCACCCGAAGCTCAACCAGATGGACCAGGACAAGGTGGC
 CAAGATGTACAGTGACCTGAGGAAAGAATCTATGGCGACAGGCAGCATCCCCATTACGGT
 GCGGCACATCGAGTCCATGATCCGCATGGCGGAGGCCACGCGCATCCATCTGCGGGA
 CTATGTGATCGAAGACGACGTCAACATGGCCATCCGCGTATGCTGGAGAGCTTCATAGA
 CACACAGAAGTTACGCGTATGCGCAGCATGCGCAAGACTTTTGCCCGCTACCTTTCATT
 CCGGCGTGACAACAATGAGCTGTTGCTTCTCACTGAAGCAGTTAGTGGCAGAGCAGGT
 GACATATCAGCGCAACCCTTTGGGGCCAGCAGGACACTATTGAGGTCCCTGAGAAGGA
 CTTGGTGGATAAGGCTCGTCAGATCAACATCCACAACCTCTCTGCATTTTATGACAGTGA
 GCTCTTACAGGATGAACAAGTTCAGCCACGACCTGAAAAGGAAAATGATCCTGCAGCAGTT
 CTGAGGCCATATGCCATCCATAAGGATTCCTTGGGATTCTGGTTTGGGGTGGTCAGTGCC
 CTCTGTGCTTTATGGACACAAAACCAGAGCACTTGATGAACTCGGGGACTAGGGTCAGG
 GCTTATAGCAGGATGCTGGCTGCACCTGGCATGACTGTTTGTCTTCCAAAGCCTGCTTT
 GTGCTTCTCACCTTTGGGTGGGATGCCTTGCCAGTGTGCTTACTTGGTTGCTGAACATC
 TTGCCACCTCCGAGTGCTTTGTCTCCACTCAGTACCTGGATCAGAGCTGCTGAGTTCAG
 GATGCCTGCGTGTGGTTAGGTGTTAGCCTTCTTACATGGATGTCAGGAGAGCTGCTGCC
 CTCTTGGCGTGAGTTGCGTATTACAGGCTGCTTTTGTGCTTTGGCCAGAGAGCTGGTTG
 AAGATGTTTGAATCGTTTTTCAGTCTCCTGCAGGTTTCTGTGCCCTGTGGTGGAAAGAGG
 GCACGACAGTGCCAGCGCAGCGTTCTGGGCTCCTCAGTCGAGGGGTGGGATGTGAGTCA
 TGCGGATTATCCACTCGCCACAGTTATCAGCTGCCATTGCTCCCTGTCTGTTTCCCCT
 CTCTTATTTGTGATTTCGGTTTGGTTTCTGTAGTTTTAATTTTTAATAAAGTTGAATAAA
 ATATAAAAAAAAAAAAAAAAAAAAAA

- Restriction Sites:** Please inquire
- ACCN:** NM_004526
- 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).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_004526.2](#), [NP_004517.2](#)

RefSeq Size: 3453 bp

RefSeq ORF: 2715 bp

Locus ID: 4171

UniProt ID: [P49736](#)

Cytogenetics: 3q21.3

Domains: MCM

Protein Families: Druggable Genome, Stem cell - Pluripotency, 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 involved in the initiation of eukaryotic genome replication. The hexameric protein complex formed by 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. This protein forms a complex with MCM4, 6, and 7, and has been shown to regulate the helicase activity of the complex. This protein is phosphorylated, and thus regulated by, protein kinases CDC2 and CDC7. Multiple alternatively spliced transcript variants have been found, but the full-length nature of some variants has not been defined. [provided by RefSeq, Oct 2012]
Transcript Variant: This variant (1) encodes a functional protein.