

Product datasheet for **RC234929**

MCM3 (NM_001270472) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCM3 (NM_001270472) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MCM3
Synonyms:	HCC5; P1-MCM3; P1.h; RLFB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC234929 representing NM_001270472
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTTATATGCTCCAAGTCCCCGCCTTCTCCTCGAGGTAACCTTTGGTGGCGGAAGAGTTCGGAAG
 TTTTCGCGCCGGGTGGAGTCATCCTGGGAACCTCCACGCGACTTTGGTGGAGGTAGTTCCTTTGGCAGCG
 GGCATGGCGGGTACCGTGGTCTGGACGATGTGGAGCTGCGGGAGGCTCAGAGAGATTACCTGGACTTCC
 TGGACGACGAGGCTTCTGAACAATGCCTTTGAGGAGCTGGTTGCCTTCCAGCGGGCCTTAAAGGATTTTG
 TGGCCTCCATTGATGCTACCTATGCCAAGCAGTATGAGGAGTTCTACGTAGGACTGGAAGGCAGCTTTGG
 CTCCAAGCAGTCTCCCCGCGACTCTTACCTCCTGCTTCTCAGCTGTGTGGTCTGTGTGGAGGCATT
 GTCATAAATGTTCTCTAGTTCGTCCTCCAAAGTCGTCGCGAGTGTCCACTACTGTCCTGCTACTAAGAAGA
 CCATAGAGCGACGTTATTCTGATCTCACCACCCTGGTGGCCTTTCCCTCCAGCTCTGTCTATCCTACCAA
 GGATGAGGAGAACAATCCCTTGAGACAGAATATGGCCTTCTGTCTACAAGGATCACCAGACCATCACC
 ATCCAGGAGATGCCGGAGAAGGCCCCAGCCGCGCAGCTCCCCCGCTCTGTGGACGTCATTCTGGATGATG
 ACTTGGTGGATAAAGCGAAGCCTGGTGACCGGGTTCAGGTGGTGGGAACCTACCGTTGCCTTCTGGAAA
 GAAGGGAGGCTACACCTCTGGGACCTTCAGGACTGTCTGATTGCCTGTAATGTTAAGCAGATGAGCAAG
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 CCTCTGCTTGCTCTTGGGAGGGTGAACGAGACCTAGAAAATGGCAGCCACATCCGTGGGGACATCAAT
 ATCTTTCTAATAGGAGACCCATCCGTTGCCAAGTCTCAGCTTCTGCGGTATGTGCTTTGCACTGCCCC
 GAGCTATCCCCACCACTGGCCGGGCTCCTCTGGAGTGGGTCTGACGGCTGCTGTACCACAGACCAGAA
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 CAGGTATGACCAGTATAAGACTCCAATGGAGAACATTGGGCTACAGGACTCACTGCTGTACGATTTGAC
 TTGCTCTTCATCATGCTGGATCAGATGGATCCTGAGCAGGATCGGGAGATCTCAGACCATGTCTTCGGA
 TGCACCGTTACAGAGCACCTGGGAGCAGGATGGCGATGCTATGCCCTTGGGTAGTGTGTGGATATCCT
 GGCCACAGATGATCCCACTTTAGCCAGGAAGATCAGCAGGACACCCAGATTTATGAGAAGCATGACAAC
 CTTCTACATGGGACCAAGAAGAAAAAGGAGAAGATGGTGAAGTGCAGCATTATGAAGAAGTACATCCATG
 TGGCCAAAATCATCAAGCCTGTCTGACACAGGAGTCGGCCACCTACATTGCAGAAGAGTATTCAGCCCT
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 CTGATTCGACTGGCCACAGCCATGCGAAGGCCCGCATGAGCAAGACTGTGGACCTGCAGGATGCAGAGG
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 AGGAGGAAATGCCTCAAGTACACACTCCAAAGACGGCAGACTCACAGGAGACCAAGGAATCCCAGAAAGT
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 AGATCCAGGCTGCTCTGAGCAAGATGCAGGATGACAATCAGTTCATGGTGTCTGAGGGCATCATCTTCT
 CATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC234929 representing NM_001270472
 Red=Cloning site Green=Tags(s)

MLICSQGPRLFLEVTFGGGKSSEVFAPGWSHPGNLHATLVEVVLWQRAWRVPCWMTWSCGRLREITWTS
 WTTRLLNNAFEELVAFQRALKDFVASIDATYAKQYEEFYVGLSEFSGSKHVSPTLTSCFLSCVVCVEGI
 VTKCSLVRPKVRSVHYCPATKTIERRYSDLTTLVAFPSVVYPTKDEENPLETEYGLSVYKDHQTIT
 IQEMPEKAPAGQLPRSDVILDDDLVDKAKPGDRVQVVGTYRCLPGKGGYTSFTFRTVLIACNVKQMSK
 DAQPSFSAEDIAKIKKFSKTRSKDIFDQLAKSLAPSIHGHDYVKKAILCLLLGGVERDLENGSHIRGDIN
 ILLIGDPSVAKSQLLRVYLCTAPRAIPTTGRGSSGVGLTAAVTTDQETGERRLEAGAMVLADRGVVCIDE
 FDKMSMDRTAIHEVMEQGRVTIAKAGIHARLNARCSVLAANPVYGRYDQYKTPMENIGLQDSLLSRFD
 LLFIMLDQMDPEQDREISDHVLRMHRYRAPGEQDGDAMPLGSAVDILATDDPNFSQEDQDQTIYEKHDN
 LLHGTKKKKKEKMVSAAFMKKYIHVAKIIPVLTQESATYIAEYSRLRSQDSMSSDTARTSPVTARTLET
 LIRLATAHAKARMSKTVDLQDAEEAVELVQYAYFKKVKLEKEKKRKRSEDESETEDEEEKSQEDQEQRK
 RRKTRQPDAKDGSYDPYDFSDTEEMPQVHTPKTADSQETKESQKVELSESRLKAFKVALLDVFREAHA
 QSIGMNRLETESINRDSEEPFSSVEIQAALSKMQDDNQVMVSEGIIFLI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:


ACCN: NM_001270472

ORF Size: 2454 bp

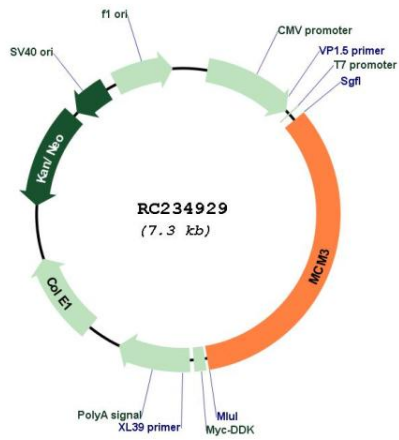
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_001270472.1 , NP_001257401.1
RefSeq Size:	3121 bp
RefSeq ORF:	2289 bp
Locus ID:	4172
UniProt ID:	P25205
Cytogenetics:	6p12.2
Protein Families:	Druggable Genome, Stem cell - Pluripotency, Transcription Factors
Protein Pathways:	Cell cycle, DNA replication
MW:	92.4 kDa
Gene Summary:	<p>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 is a subunit of the protein complex that consists of MCM2-7. It has been shown to interact directly with MCM5/CDC46. This protein also interacts with and is acetylated by MCM3AP, a chromatin-associated acetyltransferase. The acetylation of this protein inhibits the initiation of DNA replication and cell cycle progression. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2018]</p>

Product images:



Circular map for RC234929