

Product datasheet for **RG234929**

MCM3 (NM_001270472) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MCM3 (NM_001270472) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MCM3
Synonyms:	HCC5; P1-MCM3; P1.h; RLFB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG234929 representing NM_001270472
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTTATATGCTCCCAAGTCCCCGCCTTCTCCTCGAGGTAACCTTTGGTGGCGGAAGAGTTCGGAAG
 TTTTCGCGCCGGGTGGAGTCATCCTGGGAACCTCCACGCGACTTTGGTGGAGGTAGTTCCTTTGGCAGCG
 GGCATGGCGGGTACCGTGGTGTGGACGATGTGGAGCTGCGGGAGGCTCAGAGAGATTACCTGGACTTCC
 TGGACGACGAGGCTTCTGAACAATGCCTTTGAGGAGCTGGTTGCCTTCCAGCGGGCCTTAAAGGATTTG
 TGGCCTCCATTGATGCTACCTATGCCAAGCAGTATGAGGAGTTCTACGTAGGACTGGAAGGCAGCTTTGG
 CTCCAAGCAGTCTCCCCGCGACTCTTACCTCCTGCTTCTCAGCTGTGTGGTCTGTGTGGAGGCATT
 GTCATAAATGTTCTCTAGTTCGTCCTCCAAAGTCGTCGCGAGTGTCCACTACTGTCCTGCTACTAAGAAGA
 CCATAGAGCGACGTTATTCTGATCTCACCACCCTGGTGGCCTTTCCCTCCAGCTCTGTCTATCCTACCAA
 GGATGAGGAGAACAATCCCTTTGAGACAGAATATGGCCTTCTGTCTACAAGGATCACCAGACCATCACC
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 GGCCACAGATGATCCCACTTTAGCCAGGAAGATCAGCAGGACACCCAGATTTATGAGAAGCATGACAAC
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 GGAGTTGAGTGAATCCAGTTGAAGGCATTCAAGGTGGCCCTCTTGGATGTGTTCCGGGAAGCTCATGCG
 CAGTCAATCGGCATGAATCGCCTCACAGAATCCATCAACCGGGACAGCGAAGAGCCCTTCTCTTCAGTTG
 AGATCCAGGCTGCTCTGAGCAAGATGCAGGATGACAATCAGTTCATGGTGTCTGAGGGCATCATCTTCTC
 CATC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG234929 representing NM_001270472
 Red=Cloning site Green=Tags(s)

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MLICSQGPRLFLEVTFGGGKSSEVFAPGWSHPGNLHATLVEVVLWQRAWRPWCWTMWSCGRLREITWTS
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VTKCSLVRPKVRSVHYCPATKKTIERRYSDLTTLVAFPSSSVYPTKDEENPLETEYGLSVYKDHQTIT
IQEMPEKAPAGQLPRSDVILDDDLVDKAKPGDRVQVVGTYRCLPGKKGGYTSGETFRTVLIACNVKQMSK
DAQPSFSAEDIAKIKKFSKTRSKDIFDQLAKSLAPSIHGHDYVKKAILCLLLGGVERDLENGSHIRGDIN
ILLIGDPSVAKSQLLRVYLCTAPRAIPTTGRGSSGVGLTAAVTTDQETGERRLEAGAMVLADRGVVCIDE
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LIRLATAHAKARMSKTVDLQDAEEAVELVQYAYFKKVKLEKEKKRKRSEDESETEDEEEKSQEDQEQRK
RRKTRQPDAKDGSYDPYDFSDTEEMPQVHTPKTADSQETKESQKVELSESRLKAFKVALLDVFREAHA
QSIGMNRLETESINRDSEEPFSSVEIQAAALSKMQDDNQVMVSEGIIFLI
  
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TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

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_001270472.1](#), [NP_001257401.1](#)

RefSeq Size: 3121 bp

RefSeq ORF: 2289 bp

Locus ID: 4172

UniProt ID: [P25205](#)

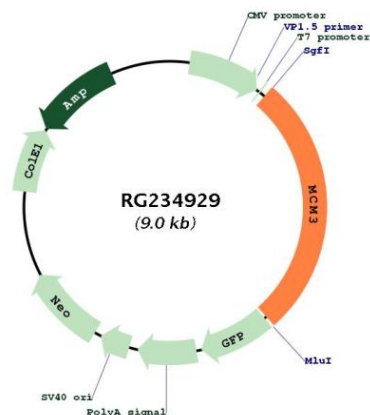
Cytogenetics: 6p12.2

Protein Families: Druggable Genome, Stem cell - Pluripotency, Transcription Factors

Protein Pathways: Cell cycle, DNA replication

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 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]

Product images:



Circular map for RG234929

