

Product datasheet for **MR215631**

Mcm3 (NM_008563) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mcm3 (NM_008563) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mcm3
Synonyms:	AL033361; C80350; Mcmd; P1; P1-MCM3; p1.m
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR215631 representing NM_008563
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGGGCACAGTAGTCTGGATGATGTGGAGCTGCGGGAAGCGCAGAGAGACTACTTGGACTTCTGG
ATGACGAGGAGGACCAAGGCATTTACCAGAACAAGGTTTCGGAACTGATCAGTGACAATCAGTATCGGCT
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GAGGAGCTGGTTGCCTCCAGCGGGCCTTGAAGGATTTGCTGGCCTCCATTGACGCCACCTACGCCAAGC
AGTATGAGGAGTTCTACATAGGATTGGAAGGCAGCTTTGGCTCAAAGCACGTCTCTCCCCGACTCTCAC
TTCCTGCTTCTCAGCTGTGTGGTCTGTGTGGAAGGCATTGTTACTAAATGCTCTCTGGTTCCGCCAAA
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GCCGGATGCAGGATGATAACAGGTCATGGTGTCTGAGGGCATCGTCTTCTTATC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
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Protein Sequence: >MR215631 representing NM_008563
 Red=Cloning site Green=Tags(s)

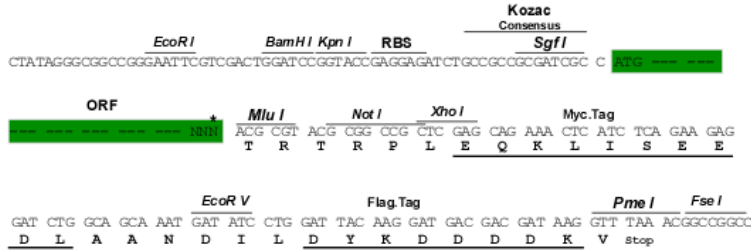
MAGTVVLDDELREAQRDYLDLDFLDEEDQGIYQNKVRELISDNQYRLIVSVNDLRRKNEKRANRLLNNAF
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 VVRSVHYCPATKKTERRYSDLTTLVAFPSSSVYPTKDEENNPLETEYGLSVYKDHQTITIQEMPEKAPA
 GQLPRSDVILDDDLVDKVKPGDRIQVVGTYRCLPGKKGCYTSFTFRTVLIACNVKQMSKDIQPAFSA
 IAKIKKFSKTRSKDVFEQLARSLAPSIHGHDYVKKAILCLLLGGVERELENGSHIRGDINILLIGDPSVA
 KSQLLRYVLCTAPRAIPTTGRGSSGVGLTAAVTTDQETGERRLEAGAMVLADRGVVCIDFDMKSDMDRT
 AIHEVMEQGRVTIAKAGIHARLNARCSVLAANPVYGRYDQYKTPMENIGLQDSSLRFDLLFIMLDQMD
 PEQDREISDHVLRMHQYRAPGEQDGDALPLGSSVDILATDDPDFTQDDQDTRIYEKHSLLHGTTKKKE
 KMVSAAFMKYIHVAKIIKPTLTQESAAYIAEEYSRLRSQDSMSSDTARTSPVTARTLETIRLATAHAK
 ARMSKTVDLQDAEEAVELVQYAYFKKVKLEKEKKRKKASEDESDLEDEEEKSQEDTEQKRKRKTHAKDGE
 SYDPYDFSEAETQMPQVHTPKTDDSQEKTDSDQETQDSQKVELSEPRLKAFKAALLEVFQEAHEQSVGML
 HLTESINRNREEPFSSSEIQAQLSRMQDDNQVMVSEGI VFLI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_008563

ORF Size: 2436 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:

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_008563.3](#)

RefSeq Size: 2886 bp

RefSeq ORF: 2439 bp

Locus ID: 17215

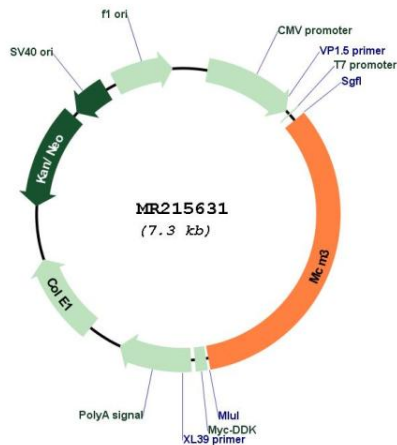
UniProt ID: [P25206](#)

Cytogenetics: 1 A4

MW: 92 kDa

Gene Summary: Acts as component of the MCM2-7 complex (MCM complex) which is the putative replicative helicase essential for 'once per cell cycle' DNA replication initiation and elongation in eukaryotic cells. The active ATPase sites in the MCM2-7 ring are formed through the interaction surfaces of two neighboring subunits such that a critical structure of a conserved arginine finger motif is provided in trans relative to the ATP-binding site of the Walker A box of the adjacent subunit. The six ATPase active sites, however, are likely to contribute differentially to the complex helicase activity. Required for DNA replication and cell proliferation.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR215631