

Product datasheet for **MR231022**

Mcm5 (NM_001302540) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Mcm5
Synonyms:	AA617332; AI324988; AL033333; Cdc46; Mcmd5; P1-CDC46
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >MR231022 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCGGGCTTCGACGACCCGGGCATTTTCTACAGCGACAGCTTCGGTGGCGACCCCGGTGCGGAAGAGG
GCCAGGCCCGCAAGTCGCAACTGCAGAGGCGATTCAAGGAGTTCCTGAGACAGTACCGAGTGGGCACCGA
TCGCACGGGCTTCACTTCAAGTACAGAGATGAACTCAAGCGGCATTACAACCTGGGTGAATACTGGATC
GAGGTGGAGATGGAGGACCTGGCCAGTTTTGACGAGGAAGTGGTGACCACTTCGATAAACAGCCGGCCG
AGCACTTACAGCTGCTTGAGGAAGCTGCCAAGGAGGTGGCAGATGAGGTGACCCGGCCCGGCCAGCTGG
AGATGAGCTGCTCCAAGACATCCAGGTCATGCTCAAGTCAGATGCCAGCCGTCGAGCATTGCGATTCTG
AAGTCAGACATGATGTACACCTGGTGAAGATCCCTGGCATCATATTTAGCCTCTGCAGTCCGTGCCA
AGGCTACTCGTATCTCCATTAGTGCCGACGTGCCACAATACCCTACCAATATCGCCATGCGCCGAGG
CCTAGAGGGCTATGCCCTTCCAGGAAGTGCAATATGGATCAGGCTGGGCGCCAAAGTGCCCACTGGAT
CCATACTTCATCATGCCTGACAAGTGCAAGTGTGTGGACTTCCAGACTCTGAAACTGCAGGAGCTGCCTG
ATGCAGTCCCTCATGGTGAGATGCCAGGCACATGCAGCTTTATTGTGACAGGTACCTGTGTGACAAGGT
TGTTCTTGGGAACAGGGTCACCATCATGGGCATTTATTCATCAAGAAGTTTGGCTTGAACCCAGCAAG
GGCCGGGACAGGGTAGGTGTGGGCATCCGAGCTCGTACATCCGAGTGTGGGCATCCAGGTGGACACAG
ATGGCTCTGGCCGAAGCTTTGCTGGGTCTGTGAGCCACAGGAAGAGGAGGAATTTGCTCGCTGGCTGC
CCTCCCAACATATATGAGCTCATCTCCAAGAGCATTTCCCTCCATCTTTGGGGCATGGATATGAAG
AAGGCCATTGCCTGCCTGCTTTTGGGGTTCCCGAAGAGGCTCCAGATGGACTCACTCGCCGAGGTG
ATATCAACTTGCTGATGTTGGGAGACCCTGGTACAGCCAAGTCTCAGCTTCTGAAGTTTGTGGAGAAGTG
CTCTCCCATTTGGGGTGTACACATCTGGGAAAGGTAGCAGTGTGCTGGCTTGAAGTGCCTCAGTGATACGG
GACCCCTCATCTCGAACTTCATCATGGAAGGTGGAGCCATGGTTCTGGCCGATGGTGGGGTTGTCTGTA
TTGATGAGTTTGACAAGATGCGGGAAGATGACCGTGTGCAATCCATGAGGCTATGGAGCAGCAGACCAT
CTCCATTGCTAAAGCTGGGATCACTACCACCTTGAAGTCTCGCTGCTGTTCTGGCTGCAGCCAAGTCA
GTGTTTGGCCGATGGGATGAGACAAAAGGGGAGGACAATATTGACTTCATGCCTACCATCTTGTCCCGAT
TTGATATGATCTTCATCGTCAAAGATGAGCACAATGAGGAGAGGGACATGATGCTAGCCAAACATGTGAT
GACTCTGCATGTGAGTGCAGTACACAGACACAGGCTGTGGAGGGTGGATCGACCTGGCCAAGATGAAG
AAGTTCACTTGCCTACTGCCGAGCGAGGTGTGGACCTCGGCTATCAGCAGAGGCAGCAGAGAAGCTGAAAA
ACCGCTACATCATATGCGGAGTGGGGCTCGTCAGCATGAGAGGGACAGTGACCGGCGTTCCAGCATCCC
CATCACTGTGCGGCAGCTGGAGGCTATTGTGCGCATTGCTGAGGCCCTCAGTAAGATGAAACTGCAGCCC
TTTGCCACTGAGGCTGATGTAGAGGAGGCATTGAGACTGTTCCAGGTGTCCACACTGGATGCTGCTTTGT
CTGGCAATCTGTGCGGGGTGGAGGGCTTCACTACCCAGGAGGACCAGGAGATGCTGAGCCGATTGAGAA
GCAACTCAAGCGCCGTTTTGCCATTGGCTCTCAGGTGTCTGAACACAGCATTGTCCAGGACTTCACCAAA
CAGAAATATCCAGAGCACGCTATCCGAAAGGTGCTGCAGCTCATGTACGAGGGGTGAGATCCAACACC
GTATGCAGCGCAAGGTGCTCTATCGCTCAAG

ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR231022 protein sequence
Red=Cloning site Green=Tags(s)

MSGFGDDPGIGIFYSDSFGDGPAAEEGQARKSQLQRRFEFLRQYRVGTDRTGFTFKYRDELKRHYNLGEYWI
EVEMEDLASFDEELADHLHKQPAEHLQLEEAKEVADEVTRPRPAGDELLQDIQVMLKSDASPSIRI
KSDMMSHLVKIPGIIISASAVRAKATRISIQCRSCHNTLTNIAMRPGLEGYALPRKCNMDQAGRPKCPLD
PYFIMPDKCKCVDFQTLKLQELPDVPHGEMPRHMLQYCDRYLCDKVVPGNRVTIMGIYSIKKFGLNPSK
GRDRVGVGIRSSYIRVLGIQVDTDGSGRSFAGSVSPQEEEEFRRLAALPNIELISKISPSIFGGMDMK
KAIACLFLFGSSRRKLPDGLTRRGDINLLMLGDPGTAKSQLKFVEKCSPIGVYTSKGSSAAGLTASVIR
DPSSRNFIMEGGAMVLADGGVVCIDEFDKMREDDRVAIHEAMEQQTISIAKAGITTTLSNRCSVLAANS
VFGRWDETKGEDNIDFMPTILSRFDMIFIVKDEHNEERDMLAKHVMTLHVLSALTQTQAVEGEIDLAKMK
KFIA YCARCARGPRLSAEAAEKLKNRYIIMRSGAQHERDSRRSSIPITVRQLEAIVRIAEALSKMKLQP
FATEADVEEALRLQVSLTDAALSGLNSGVEGFTTQEDQEMLSRIEQLKRRFAIGSQVSEHSIVQDFTK
QKYPEHAIRKLVFLMRGETIOHRMORKVLVRLK

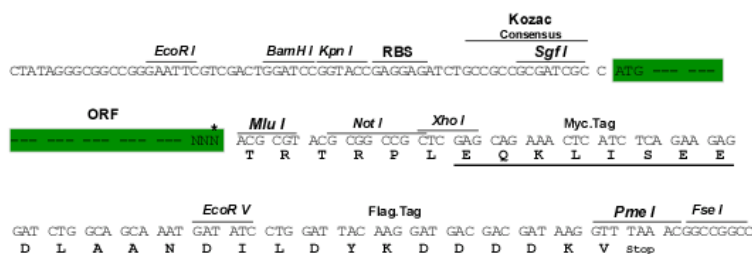
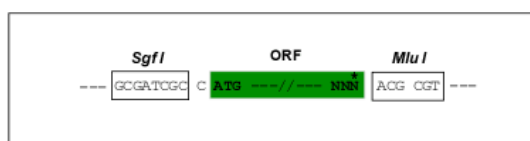
TRTRPLEOKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN:

NM_001302540

ORF Size:

2202 bp

OTI Disclaimer:

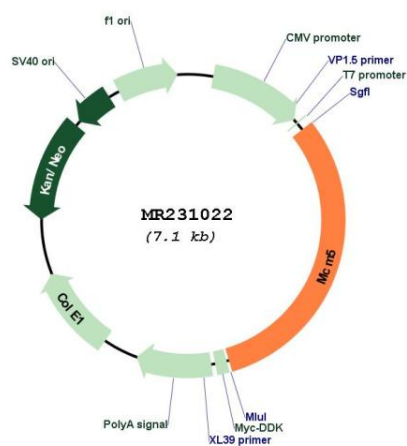
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001302540.1 , NP_001289469.1
RefSeq Size:	3417 bp
RefSeq ORF:	2205 bp
Locus ID:	17218
UniProt ID:	P49718
Cytogenetics:	8 C1
MW:	82.4 kDa
Gene Summary:	The protein encoded by this gene is a member of the oligameric minichromosome maintenance protein complex. During DNA replication, the complex loads onto chromatin in early G1 and is converted into an active replicative helicase during S phase. It functions to limit DNA synthesis to once per cell cycle. During embryogenesis, the encoded protein is negatively regulated through expression of paired box protein Pax 3. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2014]

Product images:



Circular map for MR231022