

Product datasheet for **MR210265**

Mcm7 (NM_008568) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mcm7 (NM_008568) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mcm7
Synonyms:	A1747533; mCDC47; Mcmd7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>MR210265 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCTTAAGGACTACGCGATCGAAAAAGAAAAGTTAAGAAGTTCCTCCAAGAGTTTTATTACGAGA
 ATGAGCTTGAAAAGAAGCAGTTCAGTATGGGACCCAGTTGGTTTCATCTGGCTCATCGGGAACAAGTGGC
 ACTGTATGTGGACCTGGATGACATAGCTGAAGATGACCCTGAGTTGGTCGACTCAATTTGCGAGAATGCC
 AAGCGCTACTCAAGACTGTTTGGTGTGTTGTGCAAGAGCTTTTGCCTGAGTACAAGGAGAAGGAGGTGG
 TGAATAAGGATGTCTTAGATGTTTACATTGAACACCGGCTGATGATGGAGCAGCGAAGCAGAGACCTGG
 GGCAGTCCGGAACCCCAAAACCAGTATCCTTCTGAACATGCGAAGATTTGAGTTGTATTTCCGAGGC
 CCAAGTAGCAGCAAGCCTCGAGTATCCGGGAAGTACGAGCTGACTCTGTGGGAAATTTGTTAACTGTGC
 GTGGCATTGTCACTCGTGTGTCTGAAGTCAAGCCAGGATGGTGGTGGCCACATACACTTGTGATCAGTG
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 TGCCAGACCAATCGCTCAGGGGGCGGCTGTACCTACAGACTCGTGGCTCCAATTTGTTAAATTCAGG
 AAATGAAGATTCAAGAGCATAGTGACCAAGTTCCTGTGGGAAACATCCCTCGTAGCATCACAGTGTTCT
 AGAAGGTGAGAACACAAGAATTGCCAGCCTGGTGACCATGTGAGCGTCACTGGCATCTTCTTGCCAGTC
 CTGCGCACAGGGTTCCAACAGATGGCACAGGGCTTACTCTCAGAACTTACCTGGAAGCCCACTGGATTG
 TGAAGATGACAAAGAGTGACGATGATGTCTCTGGGGCCGAGAGCTGAGCTCAGAGGAGCTGAAGCAGAT
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 AAGAAGGCGTGTCTGCTTCTGGTGGTGGTGTGGACCAGTCTCCTCAAGGCATGAAGATCAGAGGAA
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 GGCACCGGAAGTCAGTACACAACAGCCGTGGCTCCTCTGGTGTAGGGCTCACAGCAGCTGTGTTGAGA
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 TTGATGAGTTTGACAAGATGGCCGAGGCTGACCGCACAGCCATCCATGAGGTTATGGAGCAGCAGACCAT
 CTCCATCGCCAAGGCGGGGATTCTACCACGCTCAATGCCGATGCTCCATCCTGGCTGCGGCAATCCT
 GCCTACGGCCGATATAATCCCCGCCGAGTCTGGAGCAGAACGTCCAGCTTCCGGCTGCTCTGCTTTCTC
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 CACCTATGTCCACCAGCACAGCCGCGAGCCCCGCCCCAATTTGAACCTTTGGACATGAACTTATGAGA
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 CCCAGAGGCCAGCAGATGTGATATTTGCCACCATCCGTGAATTTGGTGTGTCACGGGGCGGAGTGTCCACTT
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 TATGAGGAGCTAAATGTCTGGCAGGTTAATACTTCTCGGACACGGATCACCTTTGTC

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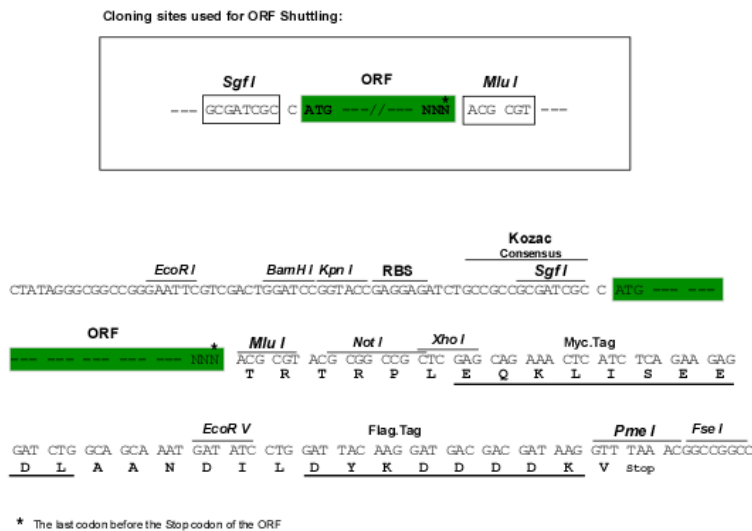
Protein Sequence: >MR210265 protein sequence
 Red=Cloning site Green=Tags(s)

MALKDYAIEKEKVKKFLQEFYYENELGKKQFKYGTQLVHLAHREQVALYVDLDDIAEDDPELVDSICENA
 KRYSRLFGDVVQELLPEYKEKEVVKNDVLDVYIEHRLMMEQSRDPGAVRNPQNQYPSSELMRRFELYFRG
 PSSSKPRVIREVRADSVGKLLTVRGIVTRVSEVKPRMVVATYTCDCQGAETYQPIQSPTFMPLIMCPSQE
 CQTNRSGGRLYLQTRGSKFVKFQEMKIQEHSQVPVGNIPRSITVVLEGENTRIAQPGDHVSVTGIFLPV
 LRTGFQQMAQGLLSETYLEAHWIVKMTKSDDDVSGAGELSSEELKQIAEEDFYEKLAASIAPEIYGHEDV
 KKALLLLL VGGVDQSPQGMKIRGNIHICLMGDPGVAKSQLLSYIDRLAPRSQYTTGRGSSGVGLTAAVLR
 DSVSGELTLEGGALVLADQGVCCIDFDKMAEADRTAIHEVMEQQTISI AKAGILTTLNARCSILAAANP
 AYGRYNRRSLEQNVQLPAALLSRFDLLWL IQDRPDRDNDLRLAQHITYVHQHSRQPPAQFELDKLMR
 RYIAMCHERQPTVPESLADYITAAAYVEMRREARASKDATYTSARTLLAILRLSTALARL RMDIVEKEDV
 NEAIRLMEMSKDLLGEKQTARTQRPADVIFATIRELVSRGRSVHFSEAEQRCISRGFPAQFQAALDE
 YEELNVQVNTSRTRITFV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_008568

ORF Size: 2160 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_008568.3](#)

RefSeq Size: 2396 bp

RefSeq ORF: 2160 bp

Locus ID: 17220

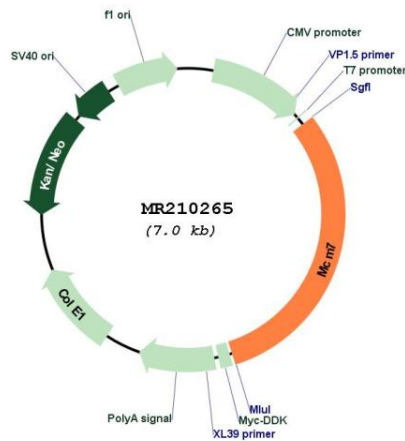
UniProt ID: [Q61881](#)

Cytogenetics: 5 G2

MW: 81.2 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 S-phase checkpoint activation upon UV-induced damage.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210265