

Product datasheet for **MG210265**

Mcm7 (NM_008568) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mcm7 (NM_008568) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mcm7
Synonyms:	A1747533; mCDC47; Mcmd7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG210265 representing NM_008568
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGCTTAAGGACTACGCGATCGAAAAAGAAAAGTTAAGAAGTTCTCCAAGAGTTTTATTACGAGA
 ATGAGCTTGAAAAGAAGCAGTTCAAGTATGGGACCCAGTTGGTTTCATCTGGCTCATCGGGAACAAGTGGC
 ACTGTATGTGGACCTGGATGACATAGCTGAAGATGACCCTGAGTTGGTCGACTCAATTTGCGAGAATGCC
 AAGCGCTACTCAAGACTGTTTGGTGTGTTGTGCAAGAGCTTTTGCCTGAGTACAAGGAGAAGGAGGTGG
 TGAATAAGGATGTCTTAGATGTTTACATTGAACACCGGCTGATGATGGAGCAGCGAAGCAGAGACCTGG
 GGCAGTCCGGAACCCCAAAACCAGTATCCTTCTGAACATGCGAAGATTTGAGTTGTATTTCCGAGGC
 CCAAGTAGCAGCAAGCCTCGAGTATCCGGGAAGTACGAGCTGACTCTGTGGGAAATTGTTAACTGTGC
 GTGGCATTGTCACTCGTGTGTCTGAAGTCAAGCCAGGATGGTGGTGGCCACATACTTGTGATCAGTG
 TGGGGCAGAGACCTACCAGCCAATCCAGTCTCCACTTTTCATGCCTCTGATCATGTGCCACGCCAGGAG
 TGCCAGACCAATCGCTCAGGGGGCGGCTGTACCTACAGACTCGTGGCTCCAAATTTGTTAAATTCAGG
 AAATGAAGATTCAAGAGCATAGTGACCAAGTTCCTGTGGGAAACATCCCTCGTAGCATCACAGTGTTCT
 AGAAGGTGAGAACACAAGAATTGCCAGCCTGGTGACCATGTCAGCGTCACTGGCATCTTCTTGCCAGTC
 CTGCGCACAGGGTTCCAACAGATGGCACAGGGCTTACTCTCAGAACTTACCTGGAAGCCCACTGGATTG
 TGAAGATGACAAAGAGTGACGATGATGTCTCTGGGGCCGAGAGCTGAGCTCAGAGGAGCTGAAGCAGAT
 TGCAGAGGAGGATTTCTATGAGAAGCTGGCCGCTTCTATTGCTCCGAGATCTATGGACATGAAGATGTG
 AAGAAGGCGCTGCTGCTCTTCTGGTGGTGGTGTGGACCAGTCTCCTCAAGGCATGAAGATCAGAGGAA
 ACATCCACATCTGCCTTATGGGAGACCCTGGTGTGGCCAAATCTCAGCTCCTATCTTACATCGACCGTCT
 GGCACCGCAAGTCAGTACACAACAGGCCGTGGCTCCTCTGGTGTAGGGCTCACAGCAGCTGTGTTGAGA
 GACTCTGTGAGTGGAGAAGTACTTTAGAGGGCGGTGCCCTGGTGTGGCTGACCAGGGCGTGTGCTGCA
 TTGATGAGTTTGACAAGATGGCCGAGGCTGACCGCACAGCCATCCATGAGGTTATGGAGCAGCAGACCAT
 CTCCATCGCCAAGGCGGGGATTCTACCACGCTCAATGCCCGATGCTCCATCCTGGCTGCGGCCAATCCT
 GCCTACGGCCGATATAATCCCCGCCGAGTCTGGAGCAGAACGTCCAGCTTCCGGCTGCTCTGCTTTCTC
 GATTCGACCTCCTCTGGCTGATTCAAGACCGGCCGACAGAGACAATGACCTCCGTTGGCCAGCACAT
 CACCTATGTCCACCAGCACAGCCGCGAGCCCCCTGCCAATTTGAACCTTTGGACATGAACTTATGAGA
 CGGTACATAGCCATGTGCCACGAGAGACAGCCACAGTGCCTGAATCTCTGGCTGACTACATCACCGCAG
 CATATGTGGAGATGAGGCGAGAGGCCCGGCCAGTAAGGATGCCACCTATACTTCTGCCCGACCCCTGCT
 GGCCATTTCCGACTTTCCACTGCTCTGGCTCGACTTCGGATGGTAGACATTGTGGAGAAGGAAGATGTA
 AATGAAGCCATAAGGTTGATGGAGATGTGAAGGACTCCCTTCTAGGTGAAAAGGGACAGACAGCTAGGA
 CCCAGAGGCCAGCAGATGTGATTTGCCACCATCCGTGAATTTGGTGTACGGGGGCGGAGTGTCCACTT
 TTCTGAGGCTGAACAGCGCTGCATATCTCGTGGCTTACACCAGCCAGTTCCAGGCAGCTCTGGATGAA
 TATGAGGAGCTAAATGTCTGGCAGGTTAATACTTCTCGGACACGGATCACCTTTGTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG210265 representing NM_008568
 Red=Cloning site Green=Tags(s)

MALKDYAIEKEKVKKFLQEFYYENELGKKQFKYGTQLVHLAHREQVALYVDLDDIAEDDPELVDSICENA
 KRYSRFLFGDVVQELLPEYKEKEVVKNDVLDVYIEHRLMMEQSRDPGAVRNPQNQYPSSELMRRFELYFRG
 PSSSKPRVIREVRADSVGKLLTVRGIVTRVSEVKPRMVVATYTCDCQGAETYQPIQSPTFMPLIMCPSQE
 CQTNRSGGRLYLQTRGSKFVKFQEMKIQEHSDQVPVGNIPRSITVVLEGENTRIAQPGDHVSVTGIPLPV
 LRTGFQQMAQGLLSETYLEAHWIVKMTKSDDDVSGAGELSSEELKQIAEEDFYEKLAASIAPEIYGHEDV
 KKALLLLL VGGVDQSPQGMKIRGNIHICLMGDPGVAKSLLSYIDRLAPRSQYTTGRGSSGVGLTAAVLR
 DSVSGELTLEGGALVLADQGVCCIDEFDKMAEADRTAIHEVMEQQTISI AKAGIL TTLNARCSILAAANP
 AYGRYNRRSLEQNVQLPAALLSRFDLLWLIQDRPDRDNDLRLAQHITYVHQHSRQPPAQFEP LDMKLMR
 RYIAMCHERQPTVPE SLADYITAAAYVEMRREARASKDATYTSARTLLAILRLSTALARL RMDIVEKEDV
 NEAIRLMEMSKDLLGEKGQTARTQRPADVIFATIRELVSRGRSVHFSEAEQRCISRGF TPAQFQAALDE
 YEELNVWQVNTSRTRITFV

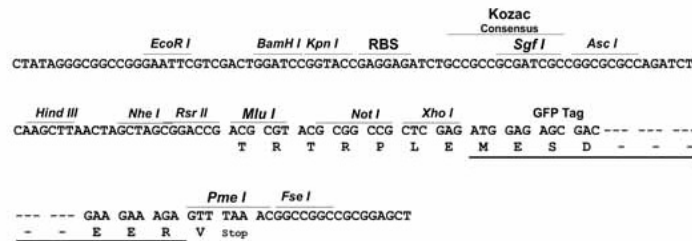
TRTRPLE - GFP Tag - V

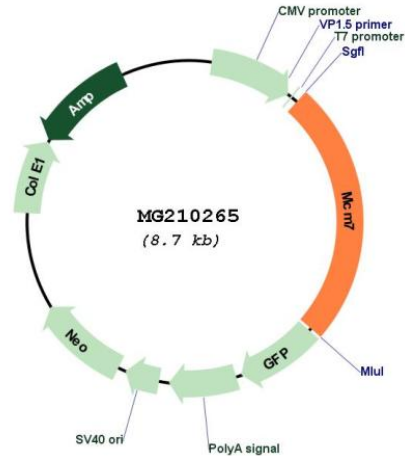
Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_008568

ORF Size: 2157 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

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]