

Product datasheet for **MR210873**

Mcm8 (BC046780) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mcm8 (BC046780) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mcm8
Synonyms:	5730432L01Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR210873 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGAGTGGTGCTTATAGAGGCAGAGTTTTGGACGAGGAAGATCCAAAGCTGGAAAAGAGGAAGAGGTG
GTGGAACTTCTCAGGAAGGTGGAGAGAAAAGAGAAAACAGAGTTGACCTGAATGAAGCTTCAGGAAAGCA
CGTTCTGCACAAGCCTCACAACCGTTACTTCAACAGTCAACATTGGATCAGTTTATCCCGTATAAGGGC
TGGAAAGCTTACTTCTCTGAAGTTACAGTAATAACTCTCCCTTTATTGAGAAGATTCAAGCATTGAGA
AATTTTTCACAAGGCATATCGACTTATACGATAAGGATGAAATAGAAAAGAAAAGGAAGCATTGTTGGTGA
TTTTAAAGAACTGACAAAAGCTGATGAAATAACTAAGTATACCCGATATAGAAAACGCACTAAGAGAT
GCCCTGAGAAAACACTGGCGTGTATGGGGCTGGCAATACATCAGGTATTAAGTAAAGGACCTTAAAGGC
ATGCCCGCAATTACAAGCTCAAGAGGGATTGTCTAACGGTGGAGAGACAATGGTAAATGTACCACATAT
TTATGCAAGAGTGTACAACATATGAGCCCTTGACACACCTCAAGAATATCCGAGCAACTTGCTATGGGAAA
TACATCTCTATACGAGGGACTGTGGTCCGGGTGAGCAACATAAAGCCTCTTTGCACCAACATGGCTTTTC
AGTGCGCTGCATGTGGAGAGATTGAGAGCTTCTCTGCCAGATGGAAAATACACCTTCTTACAAAAGTG
TCTGTGCCTGCGTGGCAGGGAGGTCAATTTGCTCCACTGCGCAGCTCTCTCTCACAGTTACACTGGAC
TGGCAGTTGATCAAAATCCAGGAGCTGATGTCTGATGCACAGAGAGAAGCTGGTCGGATCCCTCGGACGA
TAGAATGTGAAGTGTTCACGATCTTGTAGATAGTTGTGTCCAGGAGATACAGTACTGTTACTGGAAT
TGTCAAAGTCTCCAATTTGAAGAAGTTCTCGAAATAAGAATGATAAGTGCATGTTCTTTTGTACATT
GAGGCAAATTTCTGTTAGCAACAGCAAGGGGCCGAAAGCACAGACTGCAGAAGATGGTTGCAAGCATGGGA
CACTGATGGAGTTCTCCCTTAAAGACTCTATGCCATCCGAGAGATCCAGGCTGAAGAGAACCTGTCCAA
GCTCGTTGTCAACTCACTCTGTCTGTCAATTTTTGGTCAATGAACTCGTCAAAGCAGGTCTGACGTTAGCA
CTCTTTGGCGGTAGCCAGAAGTACGCAGATGACAAAACAGAATTCCTTTGAGGAGACCCACATGTCC
TGATTGTTGGAGATCCAGGCTTGGGGAAGAGTCAAGTGTACAGGCAGCATGCAACGTGGCGCCACGTGG
TGTGTATGTTTGGAAAATACCACCACCAGCTCTGGTCTCACTGTGACTCTTTCAAAGGACAGTTCTCT
GGAGATTTTGTGTTGGAAGCTGGTGCCTTGTACTTGGTACCAAGGCATCTGTGGAATAGATGAATTTG
ATAAAATGGGGAACCAACATCAAGCCCTGTTAGAAGCCATGGAACAGCAGAGTATTAGCCTTGGCAAGGC
TGGGGTAGTTTGCAGCCTCCCTGCAAGAACTTCCATTGTTGCTGCTGCAAATCCAGTCGGAGGACACTAC
AATAAAGCCAGAACGGTTTCTGAGAATTTAAAGATGGGGAGTGCCTACTGTCCAGATTCGATTTGGTCT
TTATCTTGTAGATACGCCAAATGAACAGCATGACCCTTACTTTCTGAACATGTGATCGCGATAAGAGC
TGGGAAGCAGAAAAGCGTTAGCAGTGCCACAGTCACTCGTGTGCTCAGTCAAGACTCAAATACTTCTGTA
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TTCCACATCAGCTGTTGAGGAAGTACATTGGCTATGCACGGCAGTATGTCCACCAAGGTTATCTACGGA
CGCTGCTCAGGCCCTTCAAGATTCTACCTGGAGCTCCGCAAGCAGAGCCAGCGGTGGGAGCTCACCC
ATCACCCTCGGCAGCTGGAGTCTTTGATCCGTCTGACAGAGGCACGGGCAAGGTTAGAATTGAGAGAGG
AAGCAACTAGAGAAGATGCTGAAGATATAATTGAAATTAAGAGCATAGCATGCTAGGAACCTACTCAGA
TGAAATTCGAAAACCTGGACTTTGAGCGATCCCAGCATGGCTCTGGGATGAGCAACAGGTCAACAGCAAAA
AGATTTATTTCTGCTCTCAACAGCATTGCTGAAAGAAGTTATAACAACATATTTCAATATCAACTTC
GTCAGATTGCTAAAGAACTAAACATTCAGTGTCCGATTTTGAAGAACTTCAATGGATCACTGAATGACCA
AGGTTATCTTTGAAGAAAGGCCAAAGATTTACCAACTTCAAATATG

ACGCGTACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR210873 protein sequence
Red=Cloning site Green=Tags(s)

MSGAYRGRGFGRGRFQSWKRGRGGGNFSGRWRERENVDLNEASGKHASAQASQPLLQQSTLDQFIPYKG
WKLYFSEVYSNNSPFIEKIQAFEKFFTRHIDL YDKDEIERKGSILVDFKELTKADEITNLIPDIENALRD
APEKTLACMGLAIHQVLTKDLERHAAELQAQEGLSNGGETMVNVPHIYARVYNYEPLTHLKNIRATCYGK
YISIRGTVVRVSNIKPLCTNMAFQCAACGEIQSFPLPDGKYTLPTKCPVPACRGRSFAPLRSSPLTVTLTLD
WQLIKIQELMSDAQREAGRIPRTIECELVHDLVDSCVPGDTVTVTGIKVSNSEEGSRNKNDKCMFLLYI
EANSVSNKGPKAQTAEDGCKHGTLMFSLKDLYAIREIQAEENLLKLVVNSLCPVIFGHELVKAGLTLA
LFGGSQKYADDKNRIPIRGDPHVLIVGDPGLGKSQMLQAACNVAPRGVYVCGNTTSSGLTVTLTKDSSS
GDFALEAGALVLGDQIGCIDEFDKMGNHQALLEAMEQQSISLAKAGVVCSLPARTSIVAAANPVGGHY
NKARTVSNLKMGSALLSRFDLVFILLDTPNEQHDHLLSEHVIAIRAGKQKAVSSATVTRVLSQDSNTSV
LEVVSSEKPLSERLKVAPGEQTDPIPHQLLRKYIGYARQYVHPRLSTDAALQDFYLELRKQSRVGSPP
ITTRQLESLIRL TEARARLELREEREDAEDIEIMKHSMLGTYSDEFGNLDFERSQHGSGMSNRSTAK
RFISALNSIAERTYNNIFQYHQLRQIAKELNIQVADFENFIGSLNDQGYLLKKGPKIYQLQTM

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

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: [BC046780](#), [AAH46780](#)

RefSeq Size: 2908 bp

RefSeq ORF: 2501 bp

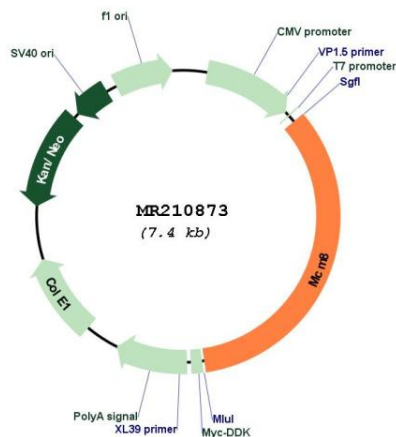
Locus ID: 66634

Cytogenetics: 2 F2

MW: 92.4 kDa

Gene Summary: Component of the MCM8-MCM9 complex, a complex involved in the repair of double-stranded DNA breaks (DBSs) and DNA interstrand cross-links (ICLs) by homologous recombination (HR). Required for DNA resection by the MRE11-RAD50-NBN/NBS1 (MRN) complex by recruiting the MRN complex to the repair site and by promoting the complex nuclease activity. Probably by regulating the localization of the MNR complex, indirectly regulates the recruitment of downstream effector RAD51 to DNA damage sites including DBSs and ICLs. The MCM8-MCM9 complex is dispensable for DNA replication and S phase progression. However, may play a non-essential for DNA replication: may be involved in the activation of the prereplicative complex (pre-RC) during G(1) phase by recruiting CDC6 to the origin recognition complex (ORC) (By similarity). Probably by regulating HR, plays a key role during gametogenesis (PubMed:22771120). Stabilizes MCM9 protein (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210873