

Product datasheet for **MR209218**

Rec8 (NM_020002) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rec8 (NM_020002) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rec8
Synonyms:	mrec; Rec8L1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR209218 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTTCTACTATCCTAACGTGCTTCAGCGCCACACAGGCTGCTTCGCCACCATCTGGCTGGCAGCAACCC
 GAGGCAGCCGTTTGGTGAAGCGTGAATACCTAAATGTGAATGTGGTAAAGACCTGCGAGGAAATCCTCAA
 TTATGTGCTGGTAAGAGTGCAACCTCCGGTGGCCGGGCTGCCCGCCCCCGCTTCTCCCTATCTCTCC
 GCCCAGCTTCAGATTGGTGTGATAAGGGTCTACTTTCAACAGTGCAGTACCTTGTGGAAGACATCCAGC
 ATATCCTGGAGCACCTACATCGTGCCAGCTGCGGATTGCATTGATATGGAGGAGGCTGACCTACCTAG
 CTTGCTTCTTCCCAACTGCCTGGCCATGATGGAGACGCTGGAAGATGCCCCAGAACCCTTTTTGGGAAG
 ATGTCTGTGGATCTAGACTTCCAGTCTTTTGATATTCCTCAGATTGCACACCTTTTAGAGGCTGCAA
 CCCCAGAAAAAAGCTCGTAAGGAGACCTTCTGAAGCCACTCCAGACCCAGGAAGCCTGACAGGACCTT
 GGCCACCGTGCAGTCCCCTGAGGTCATCACCTTACAGGAGGCAGAGCCCATCCGCATGCTGCAGATTGAA
 GGAGAGCAGGATCTCCAGAGATCAGTCGAGGAGACTTAGAACTGCTGATCGCAGAGAAAGATGACGCCA
 TCTTGCTAGAGGAACGTGAGAGGCGAGCTTCTCCGACAGCGGAGAGCTTCACTACCACTGGATGAATC
 CAGGGAAGAACCCCGGGCCCTAGAAGGTCTGGTTTGGTCTCGGCACTCTCACCTCCAGCTCCTGCGCAG
 GTGGAAGGGATACAAGAAGCACTACCAGGCCAGGTCTTCCCTCCTGAGGTACAGAAGATGACAGGCTGGG
 AGCCTGGGGCCCTACTACTGAGGTGACCCACCTCAGGAGCTGCGGCTGCCTGCCCCACCCAGTACAGA
 GAAGAGGCTCCGCTCTTTCAGAGGCCACTTCCCAGCCGACACCGGCGGCCAGTATTATTCTGGGAC
 AAGGAGACCCAGATCTCTCGGGAGAAGTTTGAGGAACAAGTGCAGACTGGGGCTCACTGCTGGGAGTATC
 CAGTGGCCAGCCTCCCAAGAGGATGCTCACAAGCCAGCGGAGCTTTCAGAACCCTCACTCTCTG
 CTGGCTACCCCCAGAACTCCTAGGTTTATGGACACACTGTGCCAGGTCGCCCAAAGAATGCTCAGACAA
 AGGCCACAGCTGGAGACTGAGGAGACAGTGGAGGAAGAGAGAGCAGCAGATGAGGAAGAGAGGAGAAAGA
 CTGAAGCTCTGAGCGAGATCGAGGTTCTGAGGGAGGCCAGGAGCCAGTGGTCCCCTCATGCTGTCTTC
 AGAGCTCTCCCTAGAAGCAGCAGAAGATGAAAAGTCTCGTACTAGCCTCATCCCCCAGAATGGTGGGCC
 TGGTCTGAGGAGGGCAGCCGAGCCCCCTGCACTGCCCATGCTGCCTGAACTTCTGAAGTGCCCATGG
 AGATGCCCCCAAGCCTGAACTCTTTCAGAGGCTGTGCTCAGGGCAGTAGCACTGAACTGCAGGCCAA
 CAAGGAGCTGGACTTCAGCAGCCTGGTCCCCCTCTCAGCCCCGAAAGTTGGCTTCTCGGGTCTCTAT
 CTGCTCTTGGTGTGTCCACACAGAAGATCCTTCTGTGGAACAACAGAAGCCATATGGGCCCTCTGA
 TTCGCTCTGGACCAAATCCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR209218 protein sequence
 Red=Cloning site Green=Tags(s)

MFYYPNVLRHTGCFATIWLAAATRGSRSLVKREYLNVNIVVKTCEEILNYVLVRVQPPVAGLPRPRFSLYLS
 AQLQIGVIRVYFQQCYLVEDIQHILEHLHRAQLRIRIDMEEADLPSLLLPNCLAMMETLEDAPEPFFGK
 MSVDPRLPSPFDIPQIRHLLAATPEKTRKETLPEATPDPRKPDRTLATVQSPEVITLQEAEPIMRLQIE
 GEQDLPEISRGDLELLIAEKDDAILLEERQGRLLRQRASLPLDESREEPRALEGAGLVSALSPAPAQ
 VEGIQEALPGQVFPPEVQKMTGWEPGALLTEVTPPQELRLPAPPSTEKRLPSLQRPPLRRHRRRQLLFW
 KETQISREKFEEQLQTGAHCWEYPVAQPPKRLTSPAELFRTPTL SGWLPPELLGLWTHCAQVPQRMLRQ
 RPQLETEETVEEERAADEEERRKTEALSEIEVLREAQEPSGPLMLSSEL SLEAAEDEKSRTSLIPPEWWA
 WSEEGQPEPPALPMLPELPEVPMEMPPRPEL SSEAVLRAVALKLQANKELDFSSLYPPLSPRKLASRVFY
 LLLVLTSTQKILLVEQKPYGPLLIRPGPKFP

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

ACCN: NM_020002

ORF Size: 1776 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_020002.3](#), [NP_064386.2](#)

RefSeq Size: 2055 bp

RefSeq ORF: 1776 bp

Locus ID: 56739

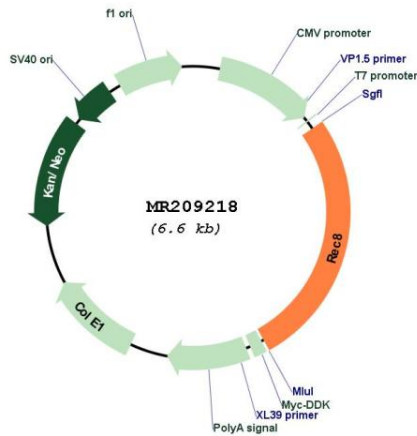
UniProt ID: [Q8C5S7](#)

Cytogenetics: 14 28.19 cM

MW: 67.4 kDa

Gene Summary: Required during meiosis for separation of sister chromatids and homologous chromosomes. Proteolytic cleavage of REC8 on chromosome arms by separin during anaphase I allows for homologous chromosome separation in meiosis I and cleavage of REC8 on centromeres during anaphase II allows for sister chromatid separation in meiosis II.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR209218