

Product datasheet for **MC219906**

Rad21 (NM_009009) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rad21 (NM_009009) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Rad21
Synonyms:	mKIAA0078; SCC1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

Fully Sequenced ORF: >MC219906 representing NM_009009
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTTCTACGCACATTTTGTCTCAGTAAACGAGGGCCTCTGGCCAAAATCTGGCTGGCGGCCATTGGG
 ACAAGAAGCTAACCAAAGCCCATGTATTTGAGTGCACCTTAGAGAGCAGTGTGGAGAGCATCATCTCACC
 AAAGGTGAAGATGGCGCTGCGGACGTCAGGACACCTTCTCCTGGGAGTAGTCCGCATCTATCACAGGAAA
 GCCAAATACCTCCTCGCAGACTGTAATGAAGCATTATATAAAATAAAGATGGCGTTTCGGCCAGGTGTTG
 TCGATCTACCTGAGGAAAATCGGGAAGCAGCTTAATGCCATTACTTTACCTGAGGAATCCACGATTT
 TGATCAGCCACTGCCAGATTTAGATGATTTGACGTGCCCCAGCAGTTCAGCCTGAACCAAAGCAGAGTA
 GAAGAGATAACCATGAGAGAAGAAGTCGGAAACATCAGTATCCTACAGGAAAATGACTTTGGTGACTTCG
 GAATGGATGACCGTGAAATAATGAGAGAAGGCAGTGCTTTGAGGATGACGACATGTTAGTGAGCACCAG
 CGTTCCAACCTTCTCCTCGAGCCAGAGCAGAGCACCAGCAACCTGAATGAAAAGATGAATCACTTAGAG
 TACGAAGACCAGTACAAAAGATGACAATTTTGGAGAAGGAAATGATGGCGGTATATTAGATGACAACTTA
 TAAGTAATAATGATGGTGGCATTTTGACGATCCCCCTGCCTTGCTGAGGCAGGGGTATGTTGCCAGA
 GCAACCTGCACATGATGACATGGATGAAGATGACAATGGCTCACTGGGTGGGCCGGATAGTCCCAGCTCT
 GTGGATCTGTGCAACCGATGCCAACTATGACTGATCAGACAACCTCTCGTCCCAAACGAGGAAGAAGCTT
 TTGCGTTGGAGCCATTGATATAACTGTCAAAGAGACAAAAGCCAAGAGGAAGAGGAAGCTGATTGTTGA
 CAGTGTCAAAGAATTGGATAGTAAGACCATTAGAGCCCAGCTTAGCGATTATTCTGATATTGTTACGACT
 CTGGACTGGCTCCGCCAACCAAGAAGCTTATGATGTGGAAGAGACAGGAGGAGTGGAAGGCTCTTCT
 TTTTACCAGCACAGCCCCTGTGGAATAACCGGCTACTGAAGCTTTCACACGCTGCCTTACCCCATTGT
 ACCAGAAGACCTTAGGAAGAGAAGGAAAAGGGGAGAGGCAGATAATCTGGATGAGTTCCTCAAAGAGTTT
 GAGAATCCAGAGGTTCCAGAGAGGAGCAGCAGCCACAGCAGCAGCCACAGCCGAGGAGATGTCA
 TCGATGAGCCATTATAGAAGAGCCAAGCCGCTCCAGGACTCAGTGATGGAGGCCAGCAGAACAACCAT
 AGAAGAATCAGCCATGCCCCACCACCCCTCAAGGAGTTAAGCGGAAAGCCGGGCAAAATAGACCCAGAG
 CCTTCGATACCTCCTCAGCAGGTAGAGCAAATGGAATACCACCAGTAGAACTTCCCCAGAGGAGCCTC
 CAAATATCTGTCAGCTGATCCCGGAGTTAGAGCTCCTACCGGAGAAGGAGAAGGAAAAAGAGAAGGAGAA
 GGAAGAGGAGGAGGAGGAGGAGGATGAAGATGCTTCAGGGGTGATCAGGATCAAGAGGAAAGGAGATGG
 AACAAACGCACTCAGCAGATGCTTCATGGTCTTCAGCGAGCTTCTGCTAAAACCTGGAGCAGAGTCTATCA
 GTTTGCTTGAGCTGTGTGAAACACAAACCGAAAGCAGGCAGCAGCAAAGTTCTACAGCTTTTTGTTCT
 TAAGAAGCAGCAAGCCATCGAGCTCACACAGGAAGAGCCGTACAGTGACATCATTGCAACCCCTGGACCA
 CGGTTCCATATTATC**TGA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_009009
Insert Size: 1908 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](#)

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_009009.4](#), [NP_033035.3](#)

RefSeq Size: 3632 bp

RefSeq ORF: 1908 bp

Locus ID: 19357

UniProt ID: [Q61550](#)

Cytogenetics: 15 C

Gene Summary: Double-strand-break repair protein rad21 homolog: As a member of the cohesin complex, involved in sister chromatid cohesion from the time of DNA replication in S phase to their segregation in mitosis, a function that is essential for proper chromosome segregation, post-replicative DNA repair, and the prevention of inappropriate recombination between repetitive regions. The cohesin complex may also play a role in spindle pole assembly during mitosis (By similarity). In interphase, cohesins may function in the control of gene expression by binding to numerous sites within the genome (PubMed:18237772). May control RUNX1 gene expression. Binds to and represses APOB gene promoter (By similarity). May play a role in embryonic gut development, possibly through the regulation of enteric neuron development (By similarity).[UniProtKB/Swiss-Prot Function]