

Product datasheet for **MR206078**

Rad9a (NM_011237) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Rad9a (NM_011237) Mouse Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | Rad9a |
| Synonyms: | Rad9 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >MR206078 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAGTGCCTGATCACCGGGGCAACGTGAAGGTGCTGGGCAAGGCTGTCCATTCGCTATCCCGAATCG
GGGACGAGCTCTATCTGGAACCCCTGAAGGACGGGCTCTCCCTACGGACTGTGAAGTCTGCTCCGTTCTGC
CTATGCCTGCTTCTTTTGGCCCACTCTTCTCCAGCAGTACCAGGCGGCTTCCCCTGGTCAGGACCTG
CTGCGCTGAAGATCCTGATGAAGGCCTCCTGTCCGCTTCCGCTCTCTGGCAATTGTGGAGAAGTCTG
TGGAGAAGTGCTGTATCTCCCTCAGTGGCAGCCACAGCCACCTGGTGGTCCAGCTCCACTGCAAGTATGG
GGTCAAGAAGACACAACTCTCCTTCCAGGACTGTGAGTCCCTGCAGGCTGTCTTCGACCCAGCCTCA
TGCCCTCACTTATTGCGCACCCAGCACGGTCTTGGCAGAGGCTGTTCTGTCCTTTCCCTTGCATTGA
CTGAGGTGACACTGGGCATTGGCCGTGGCCGGGTCATCCTGCGCAGTACCAGGAAGAGGAGGCAGA
CAGCACCAGCAAAGCCATGGTGACTGAGACCAGCATTGGGGATGAGGACTTCCAGCAGCTGCATGCCCA
GAAGGGATAGCTGTACCTTCTGCCTCAAGGAATTCGGGGGCTCCTGAGCTTTCAGAGTCAGCGAATT
TGCCCTTACTATCCACTTCGATGTTCCAGGCAGGCCAGTCATCTTACTATTGAGGATTCCTTGCTGGA
TGCCCACTTTGTCTTGGCCACACTCTTAGAGCAAGACTCATGTTCCAGGGCCCGTGTCCCAAAACCC
CACCAGCAGTGCCTCAGAAGCAGGCACACAGCACACCCCACTTAGATGACTTTACCAGTATGACATTG
ACTGTTACATGATTGCCATGGAACCACTGGAGGCAATGAGGGCTCCGGGGCACAGCCTTCCACATCCCT
CCCACCTGTCTCCCTGGCCTCCCATGACCTTGCCCCACCTCAGAGGAGGAAGCTGAGCCAGTACAGTG
CCTGGGACTCCCCACCAAGAAGTTTCGTTCACTGTTCTTTGGTCCATCCTGGCCCTGTACACTCCC
CGCAGGGTCCAACCCTGTGCTGGCTGAAGACAGTATGGTGAAGGG

ACGGTACGGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR206078 protein sequence
 Red=Cloning site Green=Tags(s)

MKCLITGGNVKVLGKAVHSLSRIGDELYLEPLKDGLSLRTVNSSRSAYACFLFAPLFFQQYQAASPGQDL
 LRCKILMKAFLSVFRSLAIVEKSVEKCCISLSGSHSHLVVQLHCKYGVKKTTHLSFQDCESLQAVFDPAS
 CPHLLRTPARVLAEAVLSFPLALTEVTLGIGRRRIVILRSYQEEAADSTKAMVTETSIGDEDFQQLHAP
 EGIAVTFCLKEFRGLLSFAESANPLTIHFDVPGRPVIFTIEDSLDDAHFVLATLLEQDSCSQGPCSPKP
 HQPVVPQKAHSTPHLDDFTSDDIDCYMIAMETTTGGNEGSGAQPSTSLPPVSLASHDLAPTSEEEAEPSTV
 PGT PPPKKFRSLFFGSILAPVHSPQGNPVLAE DSDGEG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_011237

ORF Size: 1170 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_011237.2](#), [NP_035367.1](#)

RefSeq Size: 2046 bp

RefSeq ORF: 1170 bp

Locus ID: 19367

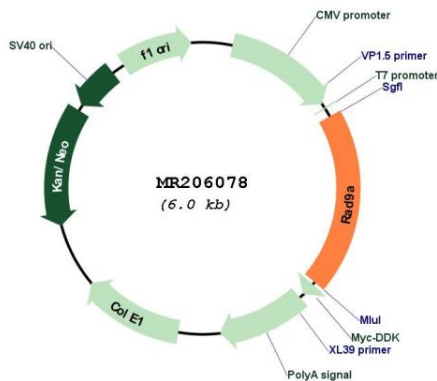
UniProt ID: [Q9Z0F6](#)

Cytogenetics: 19 A

MW: 42.1 kDa

Gene Summary: Component of the 9-1-1 cell-cycle checkpoint response complex that plays a major role in DNA repair. The 9-1-1 complex is recruited to DNA lesion upon damage by the RAD17-replication factor C (RFC) clamp loader complex. Acts then as a sliding clamp platform on DNA for several proteins involved in long-patch base excision repair (LP-BER). The 9-1-1 complex stimulates DNA polymerase beta (POLB) activity by increasing its affinity for the 3'-OH end of the primer-template and stabilizes POLB to those sites where LP-BER proceeds; endonuclease FEN1 cleavage activity on substrates with double, nick, or gap flaps of distinct sequences and lengths; and DNA ligase I (LIG1) on long-patch base excision repair substrates. The 9-1-1 complex is necessary for the recruitment of RHNO1 to sites of double-stranded breaks (DSB) occurring during the S phase. RAD9A possesses 3'->5' double stranded DNA exonuclease activity (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206078