

Product datasheet for **MC218229**

Rad5111 (BC058184) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rad5111 (BC058184) Mouse Untagged Clone
Tag: Tag Free
Symbol: Rad5111
Synonyms: R51H2, mREC2
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >BC058184
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGACTGAGATTACAGGTCACCAGGTTGCGGAAAACTCAGTTTTGCATAATGATGAGTGTCTTAGCTA
CATTACCCACCAGCCTGGGAGGATTAGAAGGGGCTGTGGTCTACATCGACACAGAGTCTGCATTTACTGC
TGAGAGACTGGTTGAGATTGCGGAATCTCGTTTTCCACAATATTTAACACTGAGGAAAAATTGCTTCTG
ACCAGCAGTAGAGTTCATCTTTGCCGAGAGCTCACCTGTGAGGGGCTTCTACAAAGGCTTGAGTCTTTGG
AGGAAGAGATCATTTGAAAGGAGTTAAGCTTGTGATTGTTGACTCCATTGCTTCTGTGGTCAGAAAGGA
GTTTGACCCGAAGCTTCAAGGCAACATCAAGAAAGGAACAAGTTCTTGGCAAAGGAGCGTCTTACTG
AAGTACCTGGCAGGGGAGTTTTCAATCCAGTTATCTTGACGAATCAAATTACGACCCATCTGAGTGGAG
CCCTCCCTTCTCAAGCAGACCTGGTGTCTCCAGCTGATGATTTGTCCCTGTCTGAAGGCACCTTCTGGATC
CAGCTGTTTGGTAGCTGCACTAGGAAACACATGGGGTCACTGTGTGAACACCCGGCTGATTCTCCAGTAC
CTTGATTAGAGAGAAGGCAGATTCTCATTGCCAAGTCTCCTCTGGCTGCCTTACCTCCTTTGTCTACA
CCATCAAGGGGAAGCCTGGTTCTTCAAGGCCACGAAAGACCATAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: BC058184
Insert Size: 747 bp



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OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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:	BC058184
RefSeq Size:	1315 bp
RefSeq ORF:	746 bp
Locus ID:	19363
Cytogenetics:	12 C3
Gene Summary:	Involved in the homologous recombination repair (HRR) pathway of double-stranded DNA breaks arising during DNA replication or induced by DNA-damaging agents. May promote the assembly of presynaptic RAD51 nucleoprotein filaments. Binds single-stranded DNA and double-stranded DNA and has DNA-dependent ATPase activity. Part of the RAD21 paralog protein complex BCDX2 which acts in the BRCA1-BRCA2-dependent HR pathway. Upon DNA damage, BCDX2 acts downstream of BRCA2 recruitment and upstream of RAD51 recruitment. BCDX2 binds predominantly to the intersection of the four duplex arms of the Holliday junction and to junction of replication forks. The BCDX2 complex was originally reported to bind single-stranded DNA, single-stranded gaps in duplex DNA and specifically to nicks in duplex DNA. The BCDX2 subcomplex RAD51B:RAD51C exhibits single-stranded DNA-dependent ATPase activity suggesting an involvement in early stages of the HR pathway (By similarity).[UniProtKB/Swiss-Prot Function]