

Product datasheet for **RC228212**

RAD51 (NM_001164270) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAD51 (NM_001164270) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RAD51
Synonyms:	BRCC5; FANCR; HRAD51; HsRad51; HsT16930; MRMV2; RAD51A; RECA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228212 representing NM_001164270 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAATGCAGATGCAGCTTGAAGCAAATGCAGATACTTCAGTGAAGAAGAAAGCTTTGGCCACAAC
CCATTTACGGTTAGAGCAGTGTGGCATAAATGCCAACGATGTGAAGAAATTGGAAGAAGCTGGATTCCA
TACTGTGGAGGCTGTTGCCTATGCGCCAAAGAAGGAGCTAATAAATATTAAGGGAATTAGTAAGCCAAA
GCTGATAAAATCTGGCTGAGGCAGCTAAATTAGTTCCAATGGGTTTCACCACTGCAACTGAATTCACC
AAAGGCGGTGAGAGATCATAAGATTACTACTGGCTCCAAGAGCTTGACAACTACTTCAAGGTGGAAT
TGAGACTGGATCTATCACAGAAATGTTTGGAGAATTCCGAAGTGGGAAGCCAGATCTGTACATACGCTA
GCTGTACCTGCCAGCTTCCATTGACCGGGTGGAGGTGAAGGAAAGGCCATGTACATTGACACTGAGG
GTACCTTTAGGCCAGAACGGCTGCTGGCAGTGGCTGAGAGGTATGGTCTCTGCGAGTGATGTCCTGGA
TAATGTAGCATATGCTCGAGCGTTCAACACAGACCACCAGACCAGCTCCTTTATCAAGCATCAGCCATG
ATGGTAGAATCTAGGTATGCACTGCTTATTGTAGACAGTGCCACCGCCCTTTACAGAACAGACTACTCGG
GTCGAGGTGAGCTTTCAGCCAGGCAGATGCACTTGCCAGGTTTCTGCGGATGCTTCTGCGACTCGCTGA
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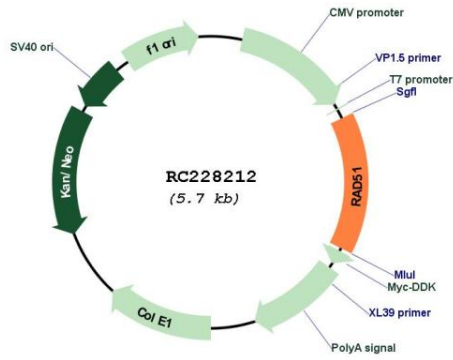
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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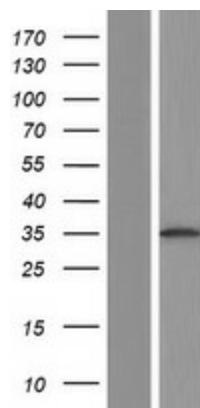
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Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex 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:	NM_001164270.2
RefSeq ORF:	843 bp
Locus ID:	5888
UniProt ID:	Q06609
Cytogenetics:	15q15.1
Protein Families:	Druggable Genome, Stem cell - Pluripotency, Transcription Factors
Protein Pathways:	Homologous recombination, Pancreatic cancer, Pathways in cancer
MW:	30.8 kDa
Gene Summary:	<p>The protein encoded by this gene is a member of the RAD51 protein family. RAD51 family members are highly similar to bacterial RecA and <i>Saccharomyces cerevisiae</i> Rad51, and are known to be involved in the homologous recombination and repair of DNA. This protein can interact with the ssDNA-binding protein RPA and RAD52, and it is thought to play roles in homologous pairing and strand transfer of DNA. This protein is also found to interact with BRCA1 and BRCA2, which may be important for the cellular response to DNA damage. BRCA2 is shown to regulate both the intracellular localization and DNA-binding ability of this protein. Loss of these controls following BRCA2 inactivation may be a key event leading to genomic instability and tumorigenesis. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2009]</p>

Product images:



Circular map for RC228212



Western blot validation of overexpression lysate (Cat# [LY431240]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228212 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).