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Product datasheet for RC217577

Rad51L1 (RAD51B) (NM_002877) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rad51L1 (RAD51B) (NM_002877) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rad51L1
Synonyms:	R51H2; RAD51L1; REC2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC217577 representing NM_002877
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGTAGCAAGAAACTAAAACGAGTGGGTTTATCACAAGAGCTGTGTGACCGTCTGAGTAGACATCAGA
TCCTTACCTGTCAGGACTTTTTATGTCTTTCCCCACTGGAGCTTATGAAGGTGACTGGTCTGAGTTATCG
AGGTGTCCATGAACTTCTATGTATGGTCAGCAGGGCCTGTGCCCCAAAGATGCAAACGGCTTATGGGATA
AAAGCACAAAGGTCTGCTGATTTCTCACCAGCATTCTTATCTACTACCCTTTCTGCTTTGGACGAAGCCC
TGCATGGTGGTGTGGCTTGTGGATCCCTCACAGAGATTACAGGTCCACCAGGTTGTGGAAAAACTCAGTT
TTGTATAATGATGAGCATTTTGGCTACATTACCCACCAACATGGGAGGATTAGAAGGAGCTGTGGTGTAC
ATTGACACAGAGTCTGCATTTAGTGCTGAAAGACTGGTTGAAATAGCAGAATCCCGTTTTCCCAGATATT
TTAACACTGAAGAAAAGTTACTTTTGACAAGTAGTAAAGTTCATCTTTATCGGGAACTCACCTGTGATGA
AGTTCTACAAAGGATTGAATCTTTGGAAGAAGAAATTATCTCAAAAGGAATTAAACTTGTGATTCTTGAC
TCTGTTGCTTCTGTGGTCAGAAAGGAGTTTGATGCACAACTTCAAGGCAATCTCAAAGAAAGAAACAAGT
TCTTGGCAAGAGAGGCATCCTCCTTGAAGTATTTGGCTGAGGAGTTTTCAATCCCAGTTATCTTGACGAA
TCAGATTACAACCCATCTGAGTGGAGCCCTGGCTTCTCAGGCAGACCTGGTGTCTCCAGCTGATGATTTG
TCCCTGTCTGAAGGCACTTCTGGATCCAGCTGTGTGATAGCCGCACTAGGAAATACCTGGAGTCACAGTG
TGAATACCCGGCTGATCCTCCAGTACCTTGATTCAGAGAGAAGACAGATTCTTATTGCCAAGTCCCCTCT
GGCTCCCTTCACCTCATTTGTCTACACCATCAAGGAGGAAGGCCTGGTTCTTCAAGCCTATGGAAATTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>RC217577 representing NM_002877
Red=Cloning site Green=Tags(s)

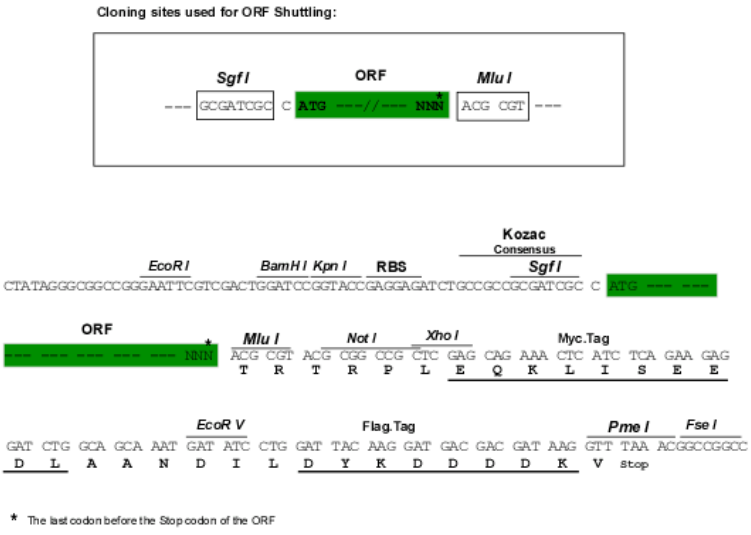
MGSKKLKRVGLSQELCDRLSRHQILTCQDFLCLSPLELMKVTGLSYRGVHELLCMVSRACAPKMQTAYGI
KAQRSADFSPAFLSTTLSALDEALHGGVACGSLTEITGPPGCGKTQFCIMMSILATLPTNMGGLEGAVVY
IDTESAFSAERLVEIAESRFPRYFNTEEKLLLTSSKVHLYRELTCDEVLQRIESLEEEIISKGIKLVILD
SVASVVRKEFDAQLQGNLKERNKFLAREASSLKYLAEEFSIPVILTNQITTHLSGALASQADLVSPADDL
SLSEGTSGSSCVIAALGNTWSHSVNTRLILQYLDSERRQILIAKSPLAPFTSFVYTIKEEGLVLQAYGNS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8054_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002877

ORF Size: 1050 bp

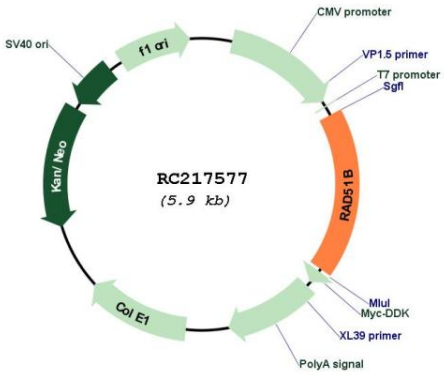
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_002877.6
RefSeq Size:	1875 bp
RefSeq ORF:	1053 bp
Locus ID:	5890
UniProt ID:	O15315
Cytogenetics:	14q24.1
Domains:	AAA
Protein Families:	Druggable Genome
Protein Pathways:	Homologous recombination
MW:	38.1 kDa
Gene Summary:	The protein encoded by this gene is a member of the RAD51 protein family. RAD51 family members are evolutionarily conserved proteins essential for DNA repair by homologous recombination. This protein has been shown to form a stable heterodimer with the family member RAD51C, which further interacts with the other family members, such as RAD51, XRCC2, and XRCC3. Overexpression of this gene was found to cause cell cycle G1 delay and cell apoptosis, which suggested a role of this protein in sensing DNA damage. Rearrangements between this locus and high mobility group AT-hook 2 (HMGA2, GeneID 8091) have been observed in uterine leiomyomata. [provided by RefSeq, Mar 2016]

Product images:



Circular map for RC217577