

Product datasheet for **RC201513**

RAD54B (NM_012415) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAD54B (NM_012415) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RAD54B
Synonyms:	RDH54
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC201513 representing NM_012415
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAGACGATCTGCAGCACCAAGTCAGTTGCAGGGGAATTCCTTCAAAAAACAAAAATTTATACCTCCAG
 GAAGAAGTAATCCAGGTCTGAATGAAGAGATTACAAAACGAATCCAGATATAAAATTTTGGGGTGT
 TGCAATTAATAACACCTTTCTCCCGTCACAAAATGATCTTAGAATATGCAGTTTAAATCTGCCTAGTGAA
 GAAAGTAGAGAAATCAATAACAGAGATAATTGCAGTGGAAAAATTGTTTTGAAGCACCTACTCGG
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 GAAATCTGATAGCCTAGTTAAATATTTAGTGTGTTGGTGTAAAGCCTTCAAAGAAAAACATAAAAAAG
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 AAGTTCAGATTGTGTTACTCATGATCTGCTTACTGTGAGTGTACAGGAGAAGAAGTTTACACAGGTGAT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201513 representing NM_012415
 Red=Cloning site Green=Tags(s)

MRRSAAPSQLQGN SFKKPKFIPPGRSNPGLNEEITKLNPDIKLFEGVA INNTFLPSQNDLRICSLNLPSE
 ESTREINNRDNC SGKYCFEAPTLATLDPHTVHSAPKEVAVSKEQEESDSL VKYF SVVWCKPSKKKHKK
 WEGDAVLIVKGSFILKNLE GKDIGRIGYKFKLEKIEEGQTLMICGKEIEVMGVI SPDDFSSGRCFQL
 GGGSTAI SHSSQVARKCF SNPFKSVCKPSSKENRQND FQNC KPRHDPYTPNSL VMPRPDKNHQWVFNKNC
 FPLVDVVIDPYLVYHLRPHQKEGIIFLYECVMGMRMNGRCGAILADEMGLGKTLQCI SLIWTLCQCQPGYG
 GKPVIKKT LIVTPGSLVNNWKEFQKWLGSERIKIFTVDQDHKVEEFIKSIFYSVLIISYEMLLRSLDQI
 KNIKFDLLICDEGHR LKNSAIKTTTALISLSCEKRIILTGTPIQNDLQEFFALIDFVNPGILGSLSSYRK
 IYEEPIILSREPSASEEEKELGERRAAELTCLTGLFILRRQTQEI INKYLPPKIENVVFCRPGALQIELYR
 KLLNSQVVRFC LQGLLENSPHLICIGALKKLCNHPCLLFNSIKEKECSSTCDKNEEKSLYKGLLSVFPAD
 YNPLLFTEKESGKLQVLSKLLAVIHEL RPTEKVVLSNYTQTLNILQEVCKRHGYAYTRLDGQTPISQRQ
 QIVDGFNSQHSSFFIFLLSSKAGGVGLNLIGGSHLILYDIDWNPATDIQAMSRVWRDQKYPVHIYRLLT
 TGTIEEKIYQRQISKQGLCGAVVDLTKTSEHIQFSVEELKNLFTLHESSDCVTHDLLDCECTGEEVHTGD
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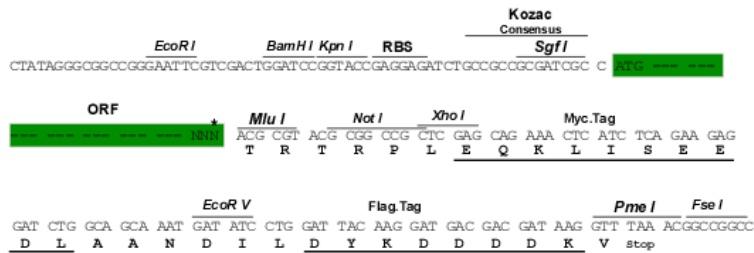
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8112_c09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



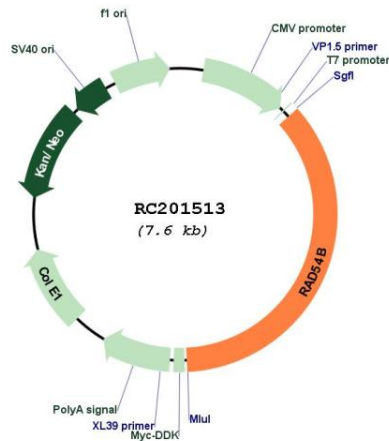
* The last codon before the Stop codon of the ORF

ACCN: NM_012415

ORF Size:	2730 bp
OTI Disclaimer:	<p>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.</p> <p>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</p>
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:	<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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_012415.3 , NP_036547.1
RefSeq Size:	3074 bp
RefSeq ORF:	2733 bp
Locus ID:	25788
UniProt ID:	Q9Y620
Cytogenetics:	8q22.1
Domains:	SNF2_N, DEAD, helicase_C
Protein Families:	Druggable Genome
Protein Pathways:	Homologous recombination
MW:	103 kDa

Gene Summary:

The protein encoded by this gene belongs to the DEAD-like helicase superfamily. It shares similarity with *Saccharomyces cerevisiae* RAD54 and RDH54, both of which are involved in homologous recombination and repair of DNA. This protein binds to double-stranded DNA, and displays ATPase activity in the presence of DNA. This gene is highly expressed in testis and spleen, which suggests active roles in meiotic and mitotic recombination. Homozygous mutations of this gene were observed in primary lymphoma and colon cancer. [provided by RefSeq, Jul 2008]

Product images:


Circular map for RC201513