

## Product datasheet for **RC231696**

### **RAD54B (NM\_001205262) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** RAD54B (NM\_001205262) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** RAD54B  
**Synonyms:** RDH54  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC231696 representing NM\_001205262  
**Red**=Cloning site **Blue**=ORF **Green**=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

**ATGAGACGATCTGCAGCACCAAGTCAGTTGCAGGGGAATTCCTTCAAAAAACCAAATTTATACCTCCAG  
GAAGAAGTAATCCAGGTCTGAATGAAGAGATTACAAAACCTGAATCCAGATATAAAATTTTGAGGGTGT  
TGCAATTAATAACACCTTCTCCCGTCACAAAATGATCTTAGAATATGCAGTTAAATCTGCCTAGTGAA  
GAAAGTACTAGAGAAATCAATAACAGAGATAATTGCAGTGGAAAATATTGTTTTGAAGCACCTACACTGG  
CAACATTAGATCCACCTCATACAGTGCAAACCTGGATGAGGAGGCACAGGCTGGTACCAGTTCACACTACAG  
G**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC231696 representing NM\_001205262  
**Red**=Cloning site **Green**=Tags(s)  
MRRSAAPSQLQGNSFKKPKFIPPGRSNPGLNEEITKLNPDIKLFEGVAINNFTLPSQNDLRICSLNLPSE  
ESTREINNDRNCSGKYCFEAPTLATLDPHTVQTMRRHRLVPVHYR

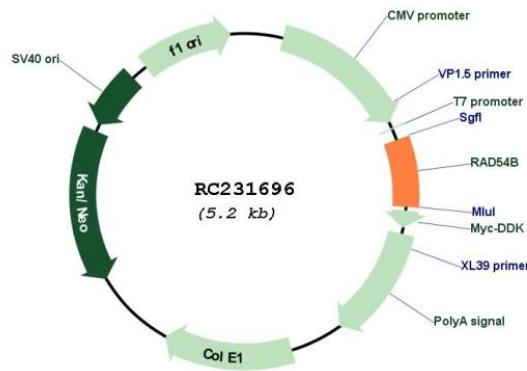
**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI



[View online »](#)

**Cloning Scheme:**

**Plasmid Map:**

**ACCN:**

NM\_001205262

**ORF Size:**

351 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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001205262.3</a>
<b>RefSeq Size:</b>	5380 bp
<b>RefSeq ORF:</b>	354 bp
<b>Locus ID:</b>	25788
<b>UniProt ID:</b>	<a href="#">O95073</a>
<b>Cytogenetics:</b>	8q22.1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Homologous recombination
<b>MW:</b>	13.8 kDa
<b>Gene Summary:</b>	The protein encoded by this gene belongs to the DEAD-like helicase superfamily. It shares similarity with <i>Saccharomyces cerevisiae</i> 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]