

Product datasheet for **SC109696**

RAD17 (NM_133339) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RAD17 (NM_133339) Human Untagged Clone
Tag:	Tag Free
Symbol:	RAD17
Synonyms:	CCYC; HRAD17; R24L; RAD17SP; RAD24
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_133339, the custom clone sequence may differ by one or more nucleotides

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ATGTCAAAACCTTTCTTAGACCAAAGGTATCTCCACAAAGGTAACAGACTGGGTTGACCCATCATTTG
ATGATTTTCTAGAGTGTAGTGGCGTCTCTACTATTACTGCCACATCATTAGGTGTGAATAACTCAAGTCA
TAGAAGAAAAAATGGGCCTTCTACATTAGAAAGCAGCAGATTTCCAGCGAGAAAAAGAGGAAATCTATCT
TCCTTAGAACAGATTTATGGTTTAGAAAAATTCAAAAGAATATCTGTCTGAAAAATGAACCATGGGTGGATA
AATATAAACAGAACTCAGCATGAACCTTGCTGTGCATAAAAAAGAAAATTGAAGAAGTCGAAACCTGGTT
AAAAGCTCAAGTTTTAGAAAGGCAACCAAAACAGGGTGGATCTATTTTATTAATAACAGGTCCTCCTGGA
TGTGGAAGACACGACCTTAAAAATACTATCAAAGGAGCATGGTATTCAAGTACAAGAGTGGATTAATC
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ATGCTTGGAGATGATCTGAGAACTGATAAGAAGATAATTCTGGTTGAAGATTTACCTAACAGTTTTATC
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AATCTCGGACAGTCTCAGTGGAGATAAATAAAGGTTATTGTTTCCCAAGAAATTGAGGAAGAGTGT
TCTATCTCAAATATTAGTTTCAACCCTGTGGCACCACAAATTATGATGAAATTTCTTAATCGAATAGTGA
CTATAGAAGCTAACAAGAATGGAGGAAAAATTACTGTCCCTGACAAAACCTCTCTAGAGTTGCTCTGTCA
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AACCTGATAGGGTTTTTGAAAATCAAGAGGTCCAAGCTATTGGTGGCAAGATGTTTCTGTGTTCTCTT
CAGAGCTTTGGGAAAAATTCTATATTGTAAGAGCATCTTTAACAGAATTAGACTCACCTCGGTTGCC
TCTCATTATCAGAATATGAACGGGATACATTACTTGTGAACCTGAGGAGGTAGTAGAAATGTCACACA
TGCTTGAGAGACTTATTTAATTTATATCTTCACCAAACTACATAGATTTCTTCATGGAAATTGATGATAT
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AGGGAATATAGCACATCTATAGCTACGAGAGGTGTGATGCATTCCAACAAAGCCCGAGGATATGCTCATT
GCCAAGGAGGAGGATCAAGTTTTCGACCCTTGACAAAACCTCAGTGGTTTCTAATAAAATAAAAGTATCG
GGAAAATTGCCTGGCAGCAAAAGCACTTTTCTGACTTCTGCCTACCAGCTTTATGCCTCCAACTCAG
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TTGGAAGGCTCCCTCTGAAGCGACACTTTGGAAGATTGAAAATGGAAGCCCTGACTGACAGGGAACATGG
AATGATAGACCCTGACAGCGGAGATGAAGCCCAGCTTAATGGAGGACATTCTGCAGAGGAATCTCTGGGT
GAACCCACTCAAGCCACTGTGCCGAAACCTGGTCTCTTCCTTTGAGTCAGAATAGTGCCAGTGAACCTGC
CTGCTAGCCAGCCCCAGCCCTTTTCAGCCCAAGGAGACATGGAAGAAAACATAATAATAGAAGACTACGA
GAGTGATGGGACATAG

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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_133339 unedited
 NGCGCTTGATTGTAAACGACTTACTATAGGCGGCCGGAATTCGCACCAGGCGTTGAGC
 CCGGGTAGGGCCAGGTGGCTGCCCTTTCACCTAGGGTAGTCCCTGGTCGCCTCCGCTCTT
 CGCCCCAAAGGGATGCAGCTCCGGGAAACAAGTGAATTCATGGTATTTTACTTTTTTGGG
 AAATACTGGAAATGAAGACCTGCAACTGTTATTTGAAATAAGGAAACTTTAATTTTCAG
 TATAAAATTGCTCAAAATAGAATTGCCTGATTTTAATGACAAAAGGTGAATTATAGTTTA
 ATGTACTGCAAGTCCTAACTACGGATGGGAATTACAGTTTATAATGTCAAAAACCTT
 TTCTTAGACCAAAGGTATCTTCCACAAAGTATATGGGAGTCCACATTTATGTAAGAAATG
 AAATAATAAAATGTATAAATAATTTGCAAAATCAGAATTGCTGTCGAAAAGTTTACTATAA
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 TCACAATCTTTTGATGAGGACGAAATGAATCAGGTAACAGACTGGGTTGACCCATCATT
 GATGATTTTCTAGAGTGTAGTGGCGTCTCTACTATTACTGCCACATCATTAGGTGTGAAT
 AACTCAAGTCATAGAAGAAAAAATGGGCCTTCTACATTAGAAAGCAGCAGATTTCCAGCG
 AGAAAAAGAGGAATCTATCTTCTTAAACAGATTTATGGTTTTAGAAAAACAAAAGAAT
 ATCTGTCTGAAAAATGAACCATGGGTGGATAAATAAACAGAACTCCGCATGAACTTG
 CTGTGCATAAAAAAGAAATTGGAGAAGTCGAAACCTGGTTAAAGCTCAAGTTTAGAAAGCA
 ACC

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_133339 unedited
 CNAGTAAAAACCTTTTTTTTTTAAATTCAACATTTTAATTGTGATATAACTTATGTAAAT
 ACTTTCCAAAAGTATCTAAGATATTCCACTGTACAACACATCAAACTATCTGAGAAGCG
 GGAGACAATAAAGTGTAATAAGGCACACAGTTTACACTCGTAATTGCATCCTAACTGT
 TGAATAGTTGATATTTACAACCCCAATAACGTTTTTGCATCCTGAATTAGTCCTTCAC
 ATCTTGATATTTGGCATAATGTTCAAAACACACTTTATACACTGACCGCTCCTTAAACC
 ACTCACAGATTTAATAAATACCGAAAAAATTAAGAGATTGAAGGCTTGATCTTCTATTT
 ACTTCAAGATGACAGAAGAGTAGGTTTCTTGATGAAATACTACAAGAATGAAGAATTA
 ACAAACTGTTGTGAATTCATCAGAAAAGCATATTAACCTGCTGAAGTACCACTGAATG
 AAACAAAAATGAAGCTGTGAAGTAGCAATCTGATTAGCAGGCTGGCTTCTATGTCCCATC
 ACTCTCGTAGTCTTCTATTATTATGTTTTCTTCCATGTCTCCTGGGCTGAAAAGGGCTG
 GGGCTGGCTAGCAGGCAGTTCACTGGCACTATTCTGACTCAAAGGAAGAGACCAGGTTTC
 CGGCACAGTGGCTTGAGTGGGTTCAACCAGAGATTCTCTGCAGAATGTCCTCCATTAAG
 CTGGGCTTCATCTCCGCTGTCAGGCTCTATCATTCCATGTTCCCTGTCAGTCAGGCTTC
 CATTTTCAAACTTCCAAAGTGTGCTTCAGA

Restriction Sites:

NotI-NotI

ACCN:

NM_133339

Insert Size:

3000 bp

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:

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_133339.1](#), [NP_579917.1](#)

RefSeq Size: 2633 bp

RefSeq ORF: 2046 bp

Locus ID: 5884

UniProt ID: [O75943](#)

Cytogenetics: 5q13.2

Domains: Rad17

Protein Families: Druggable Genome

Gene Summary: The protein encoded by this gene is highly similar to the gene product of *Schizosaccharomyces pombe rad17*, a cell cycle checkpoint gene required for cell cycle arrest and DNA damage repair in response to DNA damage. This protein shares strong similarity with DNA replication factor C (RFC), and can form a complex with RFCs. This protein binds to chromatin prior to DNA damage and is phosphorylated by the checkpoint kinase ATR following damage. This protein recruits the RAD1-RAD9-HUS1 checkpoint protein complex onto chromatin after DNA damage, which may be required for its phosphorylation. The phosphorylation of this protein is required for the DNA-damage-induced cell cycle G2 arrest, and is thought to be a critical early event during checkpoint signaling in DNA-damaged cells. Multiple alternatively spliced transcript variants of this gene, which encode four distinct protein isoforms, have been reported. Two pseudogenes, located on chromosomes 7 and 13, have been identified. [provided by RefSeq, Jul 2013]

Transcript Variant: This variant (2) lacks an internal exon in the 5' region, which results in an alternate upstream translation start codon, when compared to variant 1. The resulting protein (isoform 2) is longer and has a distinct N-terminus, as compared to isoform 1.