

## Product datasheet for **RC214670**

### **RAD17 (NM\_133343) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	RAD17 (NM_133343) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RAD17
Synonyms:	CCYC; HRAD17; R24L; RAD17SP; RAD24
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC214670 representing NM\_133343  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGAATCAGGTAACAGACTGGGTTGACCCATCATTGATGATTTCTAGAGTGTAGTGGCGTCTCTACTA  
TTACTGCCACATCATTAGGTGTGAATAACTCAAGTCATAGAAGAAAAATGGGCCTTCTACATTAGAAAG  
CAGCAGATTTCCAGCGAGAAAAAGAGAAATCTATCTTCCTTAGAACAGATTTATGGTTTAGAAAATTCA  
AAAGAATATCTGTCTGAAAATGAACCATGGGTGGATAAATAAAACCAGAACTCAGCATGAACTTGCTG  
TGCATAAAAAGAAAAATTGAAGAAGTCGAAACCTGGTTAAAAGCTCAAGTTTLAGAAAGGCAACAAAAACA  
GGGTGGATCTATTTTATAAACAGGTCCTCCTGGATGTGAAAAGACAACGACCTTAAAAATACTATCA  
AAGGAGCATGGTATTCAAGTACAAGAGTGGATTAATCCAGTTTACCAGACTTCCAAAAAGATGATTTCA  
AGGGGATGTTAATACTGAATCAAGCTTCCATATGTTCCCTATCAGTCTCAGATAGCAGTTTTCAAGA  
GTTTCTACTAAGAGCGACAAAGTATAACAAGTTACAAATGCTTGGAGATGATCTGAGAAGTATAAGAAG  
ATAATTCTGGTTGAAGATTTACCTAACAGTTTATCGGGATTCTCATACTTTACATGAAGTTCTAAGGA  
AGTATGTGAGGATTGGTCGATGTCCTTATATTTATAATCTCGGACAGTCTCAGTGGAGATAAATATCA  
AAGTTATTGTTCCCAAAGAAATTCAGGAAGAGTGTCTATCTCAAATATTAGTTTCAACCCTGTGGCA  
CCAACAATTATGATGAAATTTCTTAATCGAATAGTGACTATAGAAGCTAACAAAGAAATGGAGGAAAAATTA  
CTGTCCCTGACAAAACCTCTCTAGAGTTGCTCTGTGAGGATGTTCTGGTGATATCAGAAGTGAATAAA  
CAGCCTCCAGTTTTCTTCTTCAAAGGAGAAAAACACTACGGCCAAGGAAAAAGGAATGTCTTTAAAA  
TCAGATGCTGTGCTGTCAAATCAAACGAAGAAAAAACCTGATAGGGTTTTTAAAAATCAAGAGGTCC  
AAGCTATTGGTGGCAAAGATGTTTCTCTGTTTCTTTCAGAGCTTTGGGAAAAATCTATATTGTAAAAG  
AGCATCTTTAACAGAATTAGACTCACCTCGGTTGCCCTCTCATTATCAGAATATGAACGGGATACATTA  
CTTGTTGAACCTGAGGAGGTAGTAGAAATGTCACACATGCCTGGAGACTTATTTAATTTATATCTTACC  
AAAACATAGATTTCTTCATGGAAATGATGATATTGTGAGAGCCAGTGAATTTCTGAGTTTTGCAGA  
TATCCTCAGTGGTGACTGGAATACACGCTCTTACTCAGGGAATATAGCACATCTATAGCTACGAGAGGT  
GTGATGCATTCACAAAGCCCGAGGATATGCTCATTGCCAAGGAGGAGGATCAAGTTTTCGACCCTTGC  
ACAAACCTCAGTGGTTTCTAATAAATAAAAAGTATCGGGAAAATGCCTGGCAGCAAAAGCACTTTTTCC  
TGACTTCTGCCTACCAGCTTTATGCCGCAAACCTCAGCTATTGCCATACCTTGCTCTACTAACCATCCA  
ATGAGAAATCAAGCTCAGATTTCTTTTATCCAAGATATTGGAAGGCTCCCTCTGAAGCGACTTTGGAA  
GATTGAAAATGGAAGCCCTGACTGACAGGGAACATGGAATGATAGACCCTGACAGCGGAGATGAAGCCCA  
GCTTAATGGAGGACATTCTGCAGAGGAATCTCTGGGTGAACCCACTCAAGCCACTGTGCCGAAACCTGG  
TCTCTTCTTTGAGTCAGAATAGTGCCAGTGAAGTGCCTGCTAGCCAGCCCCAGCCCTTTTCAGCCCAAG  
GAGACATGGAAGAAAACATAATAATAGAAGACTACGAGAGTGTGGGACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC214670 representing NM\_133343  
Red=Cloning site Green=Tags(s)

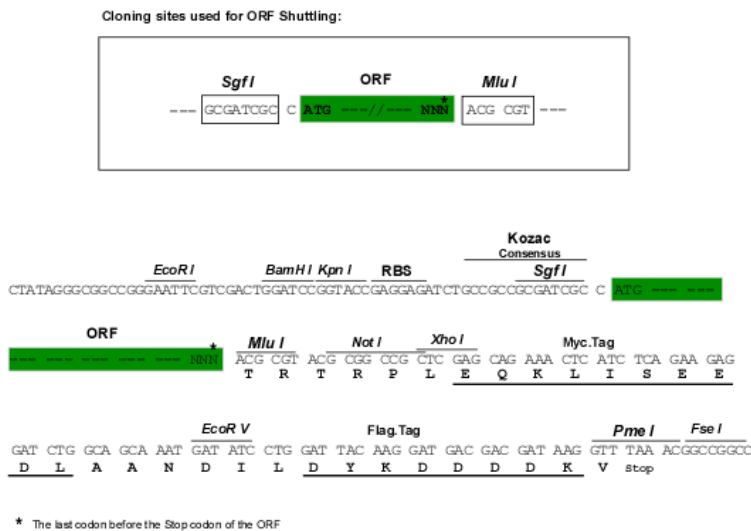
MNQVTDWVDPFDDFLECSGVSTITATSLGVNNSSHRRKNGPSTLESSRFPARKRGNLSSLEQIYGLENS  
 KEYLSENEPWVDKYPETQHELAVHKKKIEEVETWLKAQVLERQPKQGGIILLITGPPGCGKTTTLKILS  
 KEHGIQVQEWINPVLPDFQKDDFKGMFNTESSFHMFYQSQIAVFKFLLRATKYNKLQMLGDDLRTDCK  
 IILVEDLPNQFYRDSHTLHEVLRKYVVRIGRCLIFIIISDSLSGDNNQRLLPKEIQEECSISNISFNVA  
 PTIMMKFLNRIVTIEANKNGGKITVPDKTSLELLCQGCSDIRSAINSLQFSSSKGENNLRPRKKGMSLK  
 SDAVLSKSKRRKPKDRVFENQEQVQIGGKDVSLFLFRALGKILYCKRASLTELDPRLPSHLSEYERDTL  
 LVEPEEVEMSHMPGDLFNLYLHQNYIDFFMEIDDIVRASEFLSFADILSGDWNTRSLLESTSIATR  
 VMHSNKARGYAHCQGGSSFRPLHKPQWFLINKKYRENCLAAKALFPDFCLPALCRQTQLLPYLALLTIP  
 MRNQAQISFIIQDIGRLPLKRHFGRKMEALTDREHGMIDPDSGDEAQLNGGHSAAEESLGEPTQATVPETW  
 SLPLSQNSASELPASQPQFSAQGDMEENIIIEDYESDGT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6163\\_b10.zip](https://cdn.origene.com/chromatograms/mk6163_b10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_133343

**ORF Size:** 2010 bp

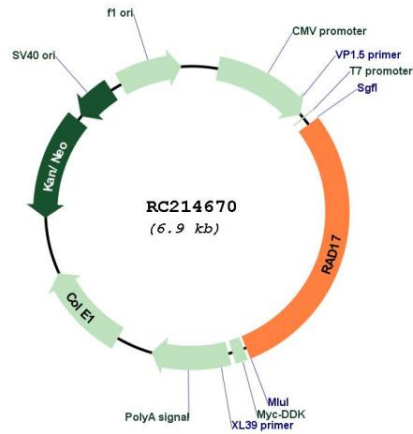
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

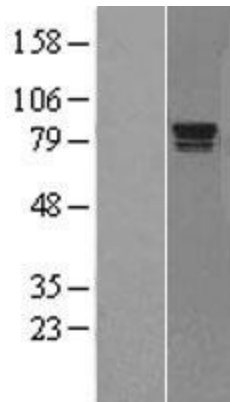
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

<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_133343.1</a> , <a href="#">NP_579921.1</a>
<b>RefSeq Size:</b>	3010 bp
<b>RefSeq ORF:</b>	2013 bp
<b>Locus ID:</b>	5884
<b>UniProt ID:</b>	<a href="#">O75943</a>
<b>Cytogenetics:</b>	5q13.2
<b>Protein Families:</b>	Druggable Genome
<b>MW:</b>	75.9 kDa
<b>Gene Summary:</b>	<p>The protein encoded by this gene is highly similar to the gene product of <i>Schizosaccharomyces pombe rad17</i>, 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]</p>

Product images:



Circular map for RC214670



Western blot validation of overexpression lysate (Cat# [LY408878]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC215866] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).