

## Product datasheet for **RC200132**

### REC8 (NM\_005132) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	REC8 (NM_005132) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	REC8
Synonyms:	HR21spB; REC8L1; Rec8p
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC200132 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTTCTACTATCCCAACGTGCTTCAGCGCCACACCGGCTGCTTTGCCACCATCTGGCTGGCGGCGACTC  
 GCGGCAGCCGGTTGGTGAAGCGGAATACCTGAGGGTGAATGTGGTGAAAACCTGCGAGGAAATCCTCAA  
 TTACGTGCTGGTACGAGTGCAACCCCGCAGCCCGGCCTGCCGCGGCCCGCTTCTCCCTATCTCTCA  
 GCCCAACTTCAGATCGGTGTGATCCGCGTCTATTCTCAACAATGCCAGTACCTCGTGAGGACATCCAGC  
 ACATCTTGGAGCGCTCCACCGTGCCAGCTGCAGATCCGAATAGATATGGAGACTGAGCTACCCAGCCT  
 GCTGCTTCTAACACCTGGCCATGATGGAGACCTAGAAGATGCTCCAGATCCCTTTTTGGGATGATG  
 TCTGTGGATCCCAGACTTCTAGTCTTTCGATATCCCTCAGATTCGACACCTCTAGAGGCTGCAATCC  
 CAGAGAGATTGAAGAGATCCCTCCTGAAGTTCCTACAGAGCCAGGGAGCCAGAGAGGATTCGGGTAC  
 TGTGCTGCCACCTGAGGCCATCAGATCCTGGAGGCAGAGCCCATACGGATGCTGGAGATTGAGGGTGAA  
 CGGGAGCTCCCAGAGGTCAGCCGCCGAGAAGTGGACCTGCTGATCGCAGAGGAAGAAGAAGCTATCTTGT  
 TAGAAATCCCAGGCTCCACCTCCAGCTCCTGCAGAGGTGGAAGGAATAGGAGAGGCACTGGGTCTGA  
 GGAGCTGAGGCTGACAGGCTGGGAACCTGGGGCCCTACTCATGGAGGTGACCCCCCGGAGGAGCTGCGT  
 CTGCCAGCCCCACCCAGCCAGAGAGGAGGCCCCAGTCCCCACCTCCTCGCCGCCCGCTGCTCGCC  
 GGTTACTGTTCTGGGACAAGGAGACTCAGATCTCCCCGGAGAAATTCAGGAACAAGTCAAACCCAGAGC  
 CCACTGCTGGGAATGTCTATGGTGCAGCCGCCGAGAGGACCATCAGAGGCCCTGCGGAGTTGTTTACA  
 ACCCAACTCTCTGGCTGGCTACCCCTGAAGTACTGGGTCTCTGGACCCATTGTGCCAGCCACCC  
 CAAAAGCCCTCAGCGGAGAGCTGCCTGAGGAGGCAGCCGCTGAGGAGGAAAGGAGAAAGATTGAAGTTCC  
 AAGTGAGATTGAGGTCCCGAGGGAGGCCCTGGAGCCAGTGTCCCTTATGGTGTCTTTAGAGATCTCC  
 CTAGAGGCAGCTGAAGAGGAGAAGTCCCGCATCAGCCTCATCCACCAGAAGAACGGTGGGCTGGCCTG  
 AGGTGGAGGCGCCAGAAGCTCCTGCATTGCCCGTGGTGCCTGAACTCCCTGAGGTGCCATGGAGATGCC  
 TTTGGTGTGCCCCAGAGCTCGAGCTGCTCTCACTGGAAGCAGTGCACAGGGCAGTGGCACTGGAGCTG  
 CAGGCTAACAGGGAGCCGACTTCAGCAGCCTGGTGTACCTCTCAGCCCCGCAGGATGGCTGCCCGGG  
 TCTTCTACCTGCTCCTGGTGTCTCAGCGCAACAGATTCTCACGTGAAACAAGAAAAGCCATATGGTCG  
 CCTCTGATCCAGCCGGGCCAGATTCCAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC200132 protein sequence  
 Red=Cloning site Green=Tags(s)

MFYYPNVLQRHTGCFATIWLAAATRGSRVLKREYLKRVNVVKTCEEILNYVLRVQPPQPLPRPRFSLYLS  
 AQLQIGVIRVYSQQCYLVEDIQHILERLHRAQLQIRIDMETELPSLLLPHLAMMETLEDAPDPFFGMM  
 SVDPRLPSPFDIPQIRHLLAAIPERVEEIPPEVPTPREPERIPVTVLPPEAITILEAEPIRMLEIEGE  
 RELPEVSRRELDLLIAEEEEAILLEIPRLPPPAPAEVEGIGEALGPEELRLTGWEPGALLMEVTPPEELR  
 LPAPPSPERRPPVPPPPRRRRRRLLFWDKETQISPEKFQEQQLQTRAHCWECMPVQPPERTIRGPAELFR  
 TPTLSGWLPELLGLWTHCAQPPPKALRRELPEEAAAAEEERRKIEVPSEIEVPREALEPSVPLMVSLEIS  
 LEAAAAEKSRIISLIPPEERWAWPEVEAPEAPALPVVPELPEVPMEMPLVLPPELELLSLEAVHRAVALEL  
 QANREPDFSSLVSPLSPRRMAARVFYLLLVLSAQQLHVKQEKPYGRLLIQPGPRFH

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6153\\_c10.zip](https://cdn.origene.com/chromatograms/mk6153_c10.zip)

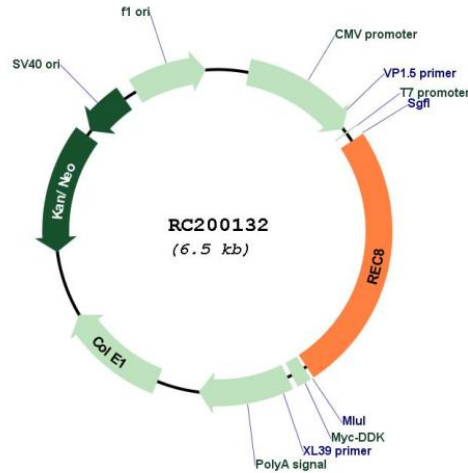
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



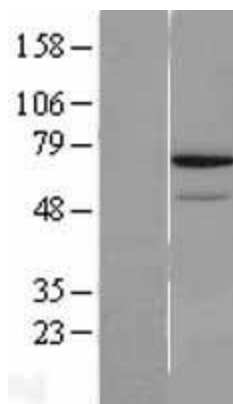
Plasmid Map:



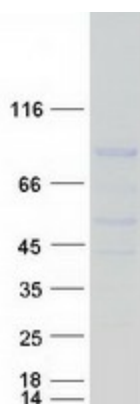
ACCN: NM\_005132

ORF Size: 1641 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<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_005132.3</a>
<b>RefSeq Size:</b>	2253 bp
<b>RefSeq ORF:</b>	1644 bp
<b>Locus ID:</b>	9985
<b>UniProt ID:</b>	<a href="#">O95072</a>
<b>Cytogenetics:</b>	14q12
<b>Domains:</b>	Rad21_Rec8, Rad21_Rec8_N
<b>Protein Pathways:</b>	Oocyte meiosis
<b>MW:</b>	62.6 kDa
<b>Gene Summary:</b>	This gene encodes a member of the kleisin family of SMC (structural maintenance of chromosome) protein partners. The protein localizes to the axial elements of chromosomes during meiosis in both oocytes and spermatocytes. In the mouse, the homologous protein is a key component of the meiotic cohesion complex, which regulates sister chromatid cohesion and recombination between homologous chromosomes. Multiple alternatively spliced variants, encoding the same protein, have been found for this gene. [provided by RefSeq, Jul 2008]

**Product images:**

Western blot validation of overexpression lysate (Cat# [LY401575]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200132 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified REC8 protein (Cat# [TP300132]). The protein was produced from HEK293T cells transfected with REC8 cDNA clone (Cat# RC200132) using MegaTran 2.0 (Cat# [TT210002]).