

## Product datasheet for **MR231330**

### **Rbbp8 (NM\_001252495) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Rbbp8 (NM_001252495) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rbbp8
Synonyms:	9930104E21Rik; CtIP; RBBP-8; RIM; SAE2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR231330 representing NM\_001252495  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGCATTTTCAGGAAGCGGCTGTGGAAGCCCTAATTCTGCGGATGCATCCAATGACTTCAAGGAAGCTCT  
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**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT  
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**Protein Sequence:** >MR231330 representing NM\_001252495  
 Red=Cloning site Green=Tags(s)

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MSISGSGCGSPNSADASNDFKELWTKLKEYHDKEVQGLQVKVTKLKKERILDAQRL EEF TKNQQLRDQQ
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KMENGGQDQVAELACEENIIPDSPVTSFSGINRLRKKENLHVRYVEQTHTKLERSLCTNELRKISKDS
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MKKQEQKERSPNGDIKMND SLEDMFDRTHEEYESCLADSF SQVPDEEELPDTTKTNIPADKQDGVKQK
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

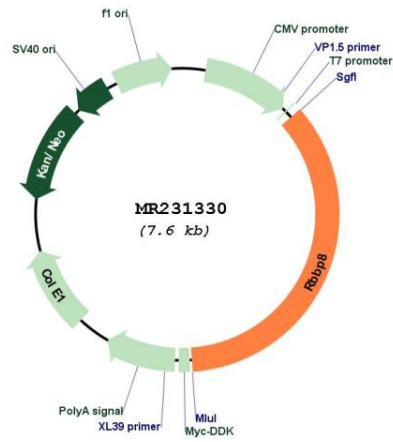
**Cloning Scheme:**



**ACCN:** NM\_001252495

<b>ORF Size:</b>	2679 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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_001252495.1</a> , <a href="#">NP_001239424.1</a>
<b>RefSeq Size:</b>	3523 bp
<b>RefSeq ORF:</b>	2682 bp
<b>Locus ID:</b>	225182
<b>UniProt ID:</b>	<a href="#">Q80YR6</a>
<b>Cytogenetics:</b>	18 A1
<b>MW:</b>	100.8 kDa
<b>Gene Summary:</b>	<p>Endonuclease that cooperates with the MRE11-RAD50-NBN (MRN) complex in DNA-end resection, the first step of double-strand break (DSB) repair through the homologous recombination (HR) pathway. HR is restricted to S and G2 phases of the cell cycle and preferentially repairs DSBs resulting from replication fork collapse. Key determinant of DSB repair pathway choice, as it commits cells to HR by preventing classical non-homologous end-joining (NHEJ). Functions downstream of the MRN complex and ATM, promotes ATR activation and its recruitment to DSBs in the S/G2 phase facilitating the generation of ssDNA.</p> <p>Component of the BRCA1-RBBP8 complex that regulates CHEK1 activation and controls cell cycle G2/M checkpoints on DNA damage. During immunoglobulin heavy chain class-switch recombination, promotes microhomology-mediated alternative end joining (A-NHEJ) and plays an essential role in chromosomal translocations.[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MR231330