

## Product datasheet for **RR205003**

### Rnaseh1 (NM\_001013097) Rat Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Rnaseh1 (NM\_001013097) Rat Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Rnaseh1  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RR205003 representing NM\_001013097  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCGCTGGCTGCTGCCGCTGTTTCGACTGTGACTGGCCGTAGTGCGCGTCAGGCGAGGTGTTGGC  
GGCTCGGCATGTTCTATGCGGTGAGGAGAGGCCGAGGACCGGGTCTTCCTGAGTTGGAGTGAGTGCAA  
AGCACAGGTGGACCGGTTCCCTGCTGCCAGGTTAAGAAATTTGCCACAGAAGATGAGGCCTGGCCTTT  
GTCAGGAGCTCTCCAGTCCGGACGGTTCAAAGGGCAGGAGAGTGCGCATGTGCAAAAGTTACAGGTGA  
AGACCAGCAAGCGGCCTCGGGAGCCTCTGGGTGAAGAGGAGGAACCTCCAGAGCCAGGGGCAAAGCACAC  
AAGACAGGACACGGAGCCAGCTGCTCTAGTGAGCAAGGATGCATTTTCTTATATGGGAGAGTCAGTCGTT  
GTCTACACGGATGGCTGTTGCTCCAGTAATGGCGGAAGCGGCACGAGCAGGAATCGGCGTTTACTGGG  
GGCCAGGCCACCCCTTAATGTAGGCATAAGGCTTCTGGGCGACAGACAAACCAGAGGGCTGAGATCCA  
TGCAGCCTGTAAGCCATCAGCAAGCCAAGGCTCAGAACATCAGCAAGCTGGTCTGTACACAGACAGC  
ATGTTACCATCAACGGGATAACTAAGGTTTCAGGGCTGGAAGAAGAATGGCTGGAGAACCAGTACAG  
GAAAAGACGTGATCAACAAGGAGGACTTCATGGAGCTGGATGAGCTCACCCAGGGCATGGACATCCAGTG  
GATGCACATTCTGGCCACTCAGGATTTGTGGCAACGAAGAAGCTGACAGACTGCAAGGGAAGGAGCG  
AAGCAATCTGAGGGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RR205003 representing NM\_001013097  
 Red=Cloning site Green=Tags(s)

MRWLLPLFRTVTLAVVRVRRGVCGLGMFYAVRRGRRTGVFLSWSECKAQVDRFPAARFKKFATEDEAWAF  
 VRSSSSPDGSKGQESAHVQKLQVKTSKRPREPLGEEEEPEPGAKHTRQDTEPAALVSKDAFSYMGESV  
 VYTDGCCSSNGRKRARAGIGVYWGPGHPLNVGIRLPGRQTNQRAEIHAAACKAITQAKAQNISKLVLVYDTS  
 MFTINGITNWVQGWKKNWRTSTGKDVINKEDFMELDEL TQGMDIQWMHIPGHSFGVGNEEADRLAREGA  
 KQSEG

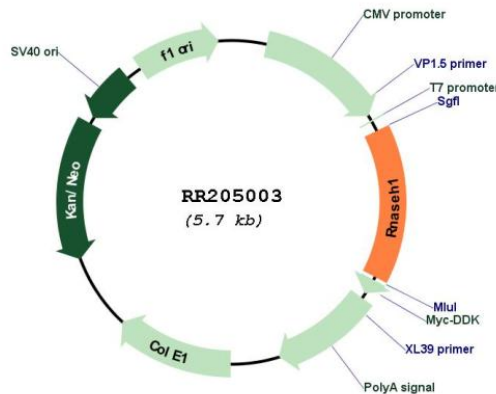
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001013097

<b>ORF Size:</b>	855 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_001013097.2</a> , <a href="#">NP_001013115.1</a>
<b>RefSeq Size:</b>	1400 bp
<b>RefSeq ORF:</b>	858 bp
<b>Locus ID:</b>	298933
<b>UniProt ID:</b>	<a href="#">Q5BK46</a>
<b>Cytogenetics:</b>	6q16
<b>MW:</b>	31.8 kDa
<b>Gene Summary:</b>	This gene encodes an endonuclease that specifically degrades the RNA of RNA-DNA hybrids and is necessary for DNA replication and repair. This enzyme is present in both mitochondria and nuclei, which are resulted from translation of a single mRNA with two in-frame initiation start codons. The use of the first start codon produces the mitochondrial isoform and the use of the second start codon produces the nuclear isoform. The production of the mitochondrial isoform is modulated by an upstream open reading frame (uORF) which encodes 7aa in rat. [provided by RefSeq, Nov 2013]