

## Product datasheet for **RC222114**

### Ribonuclease A (RNASE1) (NM\_198234) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Ribonuclease A (RNASE1) (NM\_198234) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Ribonuclease A  
**Synonyms:** RAC1; RIB1; RNS1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC222114 representing NM\_198234  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTCTGGAGAAGTCTCTTGCCGGCTCCTTCTGCTTGTCTGACTGCTGGTGTGGGCTGGGTCC  
AGCCTTCCCTGGCAAGGAATCCCGGGCAAGAAATCCAGCGGCAGCATATGGACTCAGACAGTCCCC  
CAGCAGCAGCTCCACCTACTGTAACCAATGATGAGGCGCCGGAATATGACACAGGGCGGTGCAAACCA  
GTGAACACCTTTGTGCAGAGCCCTGGTAGATGTCCAGAATGTCTGTTCCAGGAAAAGGTCACCTGCA  
AGAACGGGCAGGCAACTGCTACAAGAGCAACTCCAGCATGCACATCACAGACTGCCGCTGACAAACGG  
CTCCAGGTACCCAACTGTGCATACCGGACCAGCCGAAGGAGAGACACATCATTGTGGCCTGTGAAGGG  
AGCCCATATGTGCCAGTCCACTTTGATGCTTCTGTGGAGGACTCTACC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC222114 representing NM\_198234  
Red=Cloning site Green=Tags(s)  
MALEKSLVRLLLLVLLILLVLGWVQPSLGKESRAKKFQRQHMDSDSSPSSSSTYCNQMRRRNMTQGRCKP  
VNTFVHEPLVDVQNVCFQEKVTCKNGQGNKYKSNSSMHI TDCRL TNGSRYPNCAVRTSPKERHII VACEG  
SPYVPVHFDA SVEDST

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6145\\_f08.zip](https://cdn.origene.com/chromatograms/mk6145_f08.zip)



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_198234

ORF Size: 468 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).

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\\_198234.3](#)

RefSeq Size: 898 bp

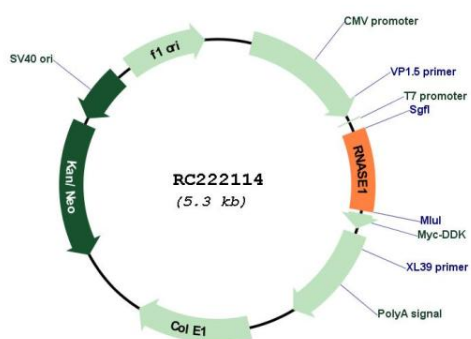
RefSeq ORF: 471 bp

Locus ID: 6035

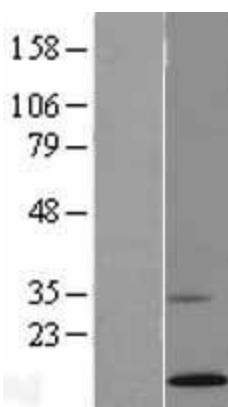
**UniProt ID:** [P07998](#)  
**Cytogenetics:** 14q11.2  
**Protein Families:** Secreted Protein, Transmembrane  
**MW:** 14.5 kDa

**Gene Summary:** This gene encodes a member of the pancreatic-type of secretory ribonucleases, a subset of the ribonuclease A superfamily. The encoded endonuclease cleaves internal phosphodiester RNA bonds on the 3'-side of pyrimidine bases. It prefers poly(C) as a substrate and hydrolyzes 2',3'-cyclic nucleotides, with a pH optimum near 8.0. The encoded protein is monomeric and more commonly acts to degrade ds-RNA over ss-RNA. Alternative splicing occurs at this locus and four transcript variants encoding the same protein have been identified. [provided by RefSeq, Jul 2008]

### Product images:



Circular map for RC222114



Western blot validation of overexpression lysate (Cat# [LY404957]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222114 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).