

### Product datasheet for RG202755

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# Ribonuclease A (RNASE1) (NM\_002933) Human Tagged ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Ribonuclease A (RNASE1) (NM 002933) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: Ribonuclease A

Synonyms: RAC1; RIB1; RNS1

Mammalian Cell

Selection:

Neomycin

**Vector:** pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG202755 representing NM\_002933

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGGCTCTGGAGAAGTCTCTTGTCCGGCTCCTTCTGCTTGTCCTGATACTGCTGGTGCTGGGCTGGGTCC
AGCCTTCCCTGGGCAAGGAATCCCGGGCCAAGAAATTCCAGCGGCAGCATATGGACTCAGACAGTTCCCC
CAGCAGCAGCTCCACCTACTGTAACCAAATGATGAGGCGCCGGAATATGACACAGGGGCGGTGCAAACCA
GTGAACACCTTTGTGCACGAGCCCCTGGTAGATGTCCAGAATGTCTGTTTCCAGGAAAAGGTCACCTGCA
AGAACGGGCAGGCAACTGCTACAAGAGCAACTCCAGCATGCACATCACAGACTGCCGCCTGACAAACGG
CTCCAGGTACCCCAACTGTGCATACCGGACCAGCCCGAAGGAGACACATCATTGTGGCCTGTGAAGGG
AGCCCATATGTGCCAGTCCACTTTGATGCTTCTGTGGAGGACTCTACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG202755 representing NM\_002933

Red=Cloning site Green=Tags(s)

MALEKSLVRLLLLVLILLVLGWVQPSLGKESRAKKFQRQHMDSDSSPSSSSTYCNQMMRRRNMTQGRCKP VNTFVHEPLVDVQNVCFQEKVTCKNGQGNCYKSNSSMHITDCRLTNGSRYPNCAYRTSPKERHIIVACEG

SPYVPVHFDASVEDST

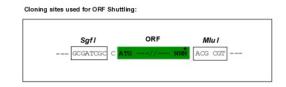
TRTRPLE - GFP Tag - V

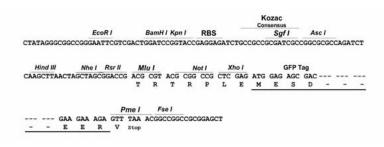
Restriction Sites: Sgfl-Mlul





#### **Cloning Scheme:**





**ACCN:** NM\_002933

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:** <u>NM 002933.5</u>

 RefSeq Size:
 827 bp

 RefSeq ORF:
 471 bp

 Locus ID:
 6035

 UniProt ID:
 P07998



Cytogenetics: 14q11.2

Domains: RNAse\_Pc

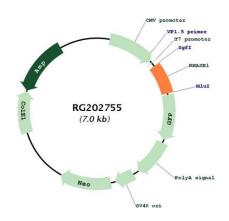
**Protein Families:** Secreted Protein, Transmembrane

**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 RG202755