

Product datasheet for **SC108842**

Ribonuclease A (RNASE1) (NM_002933) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ribonuclease A (RNASE1) (NM_002933) Human Untagged Clone
Tag:	Tag Free
Symbol:	Ribonuclease A
Synonyms:	RAC1; RIB1; RNS1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC108842 sequence for NM_002933 edited (data generated by NextGen Sequencing)

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ATGGCTCTGGAGAAGTCTTTGTCCGGCTCCTTCTGCTTGTCTGATACTGCTGGTGCTG
GGCTGGGTCCAGCCTTCCCTGGGCAAGGAATCCCGGGCCAAGAAATTCAGCGGCAGCAT
ATGGACTCAGACAGTTCCCCAGCAGCAGCTCCACCTACTGTAACCAAATGATGAGGCGC
CGGAATATGACACAGGGCGGTGCAAACAGTGAACACCTTTGTGCACGAGCCCTGGTA
GATGTCCAGAATGTCTGTTTCCAGGAAAAGTCACTGCAAGAACGGGCAGGGCAACTGC
TACAAGAGCAACTCCAGCATGCACATCACAGACTGCCGCCTGACAAACGGCTCCAGGTAC
CCCAACTGTGCATACCGGACCAGCCGAAGGAGAGACACATCATTGTGGCCTGTGAAGGG
AGCCCATATGTGCCAGTCCACTTTGATGCTTCTGTGGAGGACTCTACCTAA
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Clone variation with respect to NM_002933.4



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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_002933 unedited TAGCATTGTATACGACTCCTATAGGCGGCCGCGATTCCGGCACGAGGCTTCCATCTCTC TCANACACCAAGCTGCAGATCCAGGTCACCACCTAGAGGGGAGGAAGACCTCGCTTTGGA GAGTGGGAATAAAACGCTCGTGGAAAAGGTACACGCTTTTCTGGGAAAGTGAGGCCACC ATGGCTCTGGAGAAGTCTTTGTCCGGCTCCTTCTGCTGTCTGATACTGCTGGTGCTG GGCTGGGTCCAGCCTTCCCTGGGCAAGGAATCCCGGGCCAAGAAATCCAGCGGCAGCAT ATGGACTCAGACAGTTCCTCCAGCAGCAGCTCCACCTACTGTAACCAAATGATGAGGCGC CGAATATGACACAGGGGCGGTGCAAACCAGTGAACACCTTTGTGCACGAGCCCCTGGTA GATGTCCAGAATGTCTGTTTCCAGGAAAAGGTACCTGCAAGAACGGGCAGGGCAACTGC TACAAGAGCAACTCCAGCATGCACATCACAGACTGCCGCCTGACAAACGGCTCCAGGTAC CCCAACTGTGCATACCGGACCAGCCGAAGGAGAGACACATCATTGTGGCCTGTGAAGGG AGCCCATATGTGCCAGTCCACTTTGATGCTTCTGTGGAGGACTCTACCTAAGGTCAGAGC AGCGAGAATACCCACCTCCCTCAACCTCATNCTCTCCACAGCTGCCTTCTCCCTTCTCT TCCCTGTGTGAAGAAGTAACTACAGNTAGGGGCTCCTATTCAACACACACATGCTTCC CTTCTCCTGAGTCCATNCCTGCGTGATCTTGNCGGTGAACAATGGGTTGTGAGGTGGGCC ATGTTAACCCCTCCACTTCTCTTTCATAAAAGCAGTTGCAAACNNNNNNNNNNNNNNNC NCCCCCCCCCNCCCCCCCCNACCCACC
Restriction Sites:	NotI-NotI
ACCN:	NM_002933
Insert Size:	980 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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_002933.3 , NP_002924.1
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]

Transcript Variant: This variant (4) is the predominant transcript. Variants 1, 2, 3 and 4 encode the same protein.