

Product datasheet for MR228841

Rnaseh1 (NM_001286865) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Rnaseh1 (NM_001286865) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Rnaseh1

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >MR228841 representing NM_001286865
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



Protein Sequence: >MR228841 representing NM_001286865

Red=Cloning site Green=Tags(s)

MFYAVRRGRRTGVFLSWSECKAQVDRFPAARFKKFATEDEAWAFVRSSSSPDGSKGQESAHEQKSQAKTS KRPREPLGEGEELPEPGPKHTRQDTEPSAVVSKDAFSYMGESVVVYTDGCCSSNGRKRARAGIGVYWGPG HPLNVGIRLPGRQTNQRAEIHAACKAIMQAKAQNISKLVLYTDSMFTINGITNWVQGWKKNGWRTSTGKD VINKEDFMELDELTQGMDIQWMHIPGHSGFVGNEEADRLAREGAKQSED

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

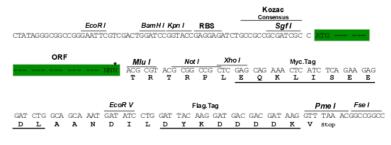
Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

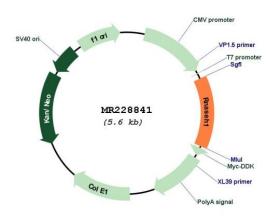






^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM 001286865

ORF Size: 777 bp

Rnaseh1 (NM_001286865) Mouse Tagged ORF Clone - MR228841

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 001286865.1</u>, <u>NP 001273794.1</u>

RefSeq Size: 1472 bp
RefSeq ORF: 780 bp
Locus ID: 19819
Cytogenetics: 12 A2

MW: 29.3 kDa

Gene Summary: 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

mouse. An alternately spliced transcript variant has been found which is a candidate for

nonsense-mediated mRNA decay (NMD). [provided by RefSeq, Nov 2013]