

## **Product datasheet for MR203888**

## Rnaseh1 (NM 011275) Mouse Tagged ORF Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: Rnaseh1 (NM\_011275) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Rnaseh1

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>MR203888 ORF sequence

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

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA



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>MR203888 protein sequence **Protein Sequence:** 

Red=Cloning site Green=Tags(s)

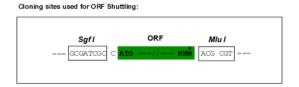
MRWLLPLSRTVTLAVVRLRRGICGLGMFYAVRRGRRTGVFLSWSECKAQVDRFPAARFKKFATEDEAWAF VRSSSSPDGSKGQESAHEQKSQVKTSKRPREPLGEGEELPEPGPKHTRQDTEPAAVVSKDTFSYMGESVI VYTDGCCSSNGRKRARAGIGVYWGPGHPLNVGIRLPGRQTNQRAEIHAACKAIMQAKAQNISKLVLYTDS MFTINGITNWVQGWKKNGWRTSTGKDVINKEDFMELDELTQGMDIQWMHIPGHSGFVGNEEADRLAREGA **KQSED** 

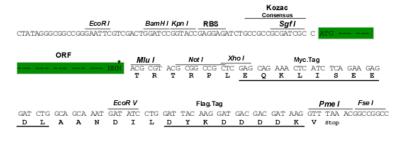
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** 

Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

ACCN: NM 011275

**ORF Size:** 858 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts

of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by

calling 301.340.3188 option 3 for pricing and delivery.

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

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 011275.1, NM 011275.2, NM 011275.3, NP 035405.1</u>

 RefSeq Size:
 1472 bp

 RefSeq ORF:
 858 bp

 Locus ID:
 19819

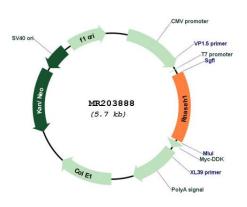
 Cytogenetics:
 12 A2

 MW:
 31.8 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]

## **Product images:**



Circular map for MR203888