

# RNASEH2A cDNA

Catalog Number: ATGD0491

## PRODUCT INFORMATION

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**Catalog number**

ATGD0491

**Product type**

cDNA

**Species**

Human

**NCBI Accession No.**

NP\_006388.2

**Alternative Names**

AGS4, JUNB, RNASEHI, RNHIA, RNHL

**mRNA Refseq**

NM\_006397.2

**OMIM**

606034

**Chromosome location**

19p13.2

## PRODUCT SPECIFICATION

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**Formulation**

Lyophilized

**Storage**

Store the plasmid at -20C.

**cDNA Size**

900bp

**Preparation before usage**

1. Centrifuge at 7000rpm for 1 minute.
2. Carefully open the vial and add 100ul of sterile water to dissolve the DNA. Each tube contains approximately 10ug of lyophilized plasmid.

**Vector description**

This shuttle vector contains the complete ORF. It is inseted BamH I to Xho I. The gene insert contains multiple cloning sites which can be used to easily cut and transfer the gene and recombination site into your expression vector.

**Cloning Vector**

pATGen (puc19-derived cloning vector)

**General Description**

# RNASEH2A cDNA

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RNASEH2A is a component of the heterotrimeric type II ribonuclease H enzyme (RNaseH2). RNaseH2 is the major source of ribonuclease H activity in mammalian cells and endonucleolytically cleaves ribonucleotides. It is predicted to remove Okazaki fragment RNA primers during lagging strand DNA synthesis and to excise single ribonucleotides from DNA-DNA duplexes. Mutations in this gene cause Aicardi-Goutieres Syndrome (AGS), an autosomal recessive neurological disorder characterized by progressive microcephaly and psychomotor retardation, intracranial calcifications, elevated levels of interferon-alpha and white blood cells in the cerebrospinal fluid.

## DATA

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### Sequence nucleotides

```
ATGGATCTCAGCGAGCTGGAGAGAGACAATACAGGCCGCTGTCGCCTGAGTTCGCCTGTGCCCGCGGTGTGCCGCAAGGA
GCCTTGCGTCTGGGCGTTCGATGAGGCGGGCAGGGGCCCCGTGCTGGGCCCATGGTCTACGCCATCTGTTATTGTCCCC
TGCCTCGCCTGGCAGATCTGGAGGCGCTGAAAGTGGCAGACTCAAAGACCCTATTGGAGAGCGAGCGGGAAAGGCTGTTT
GCGAAAATGGAGGACACGGACTTTGTCGGCTGGGCGCTGGATGTGCTGTCTCCAAACCTCATCTCTACCAGCATGCTTGGG
CGGGTCAAATACAACCTGAACTCCCTGTCACATGATACAGCCACTGGGCTTATACAGTATGCATTGGACCAGGGCGTGAAC
GTCACCCAGGTATTCGTGGACACCGTAGGGATGCCAGAGACATAACCAGGCGCGGCTGCAGCAAAGTTTTCCCGGGATTGA
GGTGACGGTCAAGGCCAAAGCAGATGCCCTTACCCGGTGGTTAGTGCTGCCAGCATCTGTGCCAAGGTGGCCCGGGACC
AGGCCGTGAAGAAATGGCAGTTCGTGGAGAACTGCAGGACTTGGATACTGATTATGGCTCAGGCTACCCCAATGATCCCA
AGACAAAAGCGTGGTTGAAGGAGCACGTGGAGCCTGTGTTCCGGCTTCCCCAGTTTGTCCGGTTCAGCTGGCGCACGGCC
CAGACCATCCTGGAGAAAGAGGCGGAAGATGTTATATGGGAGGACTCAGCATCCGAGAATCAGGAGGGACTCAGGAAGAT
CACATCCTACTTCCTCAATGAAGGGTCCCAAGCCCGTCCCCGTTCTCCACCGATATTTCTGGAACGCGGCCTGGAGTCA
GCAACCAGCCTCTAG
```

### Transaction Sequence

```
MDLSELERDN TGRCLSSPV PAVCRKEPCV LGVDEAGRGP VLGPMVYAIC YCPLPRLADLEALKVADSKT LLESERERLF
AKMEDTDFVG WALDVLSPNL ISTSMLGRVK YLNLSLHDTATGLIQYALD QGVNVTQVFV DTVGMPETYQ ARLQQSFGI
EVTVKAKADA LYPVVSAAISAKVARDQAV KKWQFVEKLQ DLDTDYGSY PNDPKTKAWL KEHVEPVFGF
PQFVRFSWRTAQILEKEAE DVIWEDSASE NQEGLRKITS YFLNEGSQAR PRSSHRYFLE RGLSATSLS
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