

## Product datasheet for **RG226833**

### **RNASEH2B (NM\_001142279) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RNASEH2B (NM_001142279) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	RNASEH2B
Synonyms:	AGS2; DLEU8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG226833 representing NM_001142279 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGCTGGCGTGGACTGCGGGGACGGGGTTGGCGCCCGGCAGCACGTGTTCTGTTTCAGAATATT  
TAAAAGATGCTTCAAAGAAGATGAAAAATGGGCTAATGTTTGTAAACTGGTTAACCCCTGTTCAAGGAGA  
AGGAGCCATTTACTTGTCAATATGTGTCTACAGCAGCTGTTTGAAGTAAAGTTTTCAAGGAAAAACAC  
CATTCTTGTTTATAAATCAATCAGTTCAATCAGGAGGTCTTCTCCATTTGCCACACCTGTGGATCCTC  
TATTTCTGCTTCTCCACTACCTCATAAAGGCTGATAAGGAGGGGAAGTTTCAGCCCTTGATCAAGTTGT  
GGTGGATAACGTGTTTCCAAATTGCATCTTGTGCTGAACTTCCTGGACTTGAGAAGTTACTTCATCAT  
GTGACAGAGGAAAAAGGTAATCCAGAAATAGACAACAAGAAATATTACAAGTACAGCAAAGAGAAGACAT  
TAAAGTGGCTGGAAAAAAGGTTAATCAAAGTGTGGCAGCATTAAAAACCAATAATGTGAATGTCAGTTC  
CCGGGTACAGTCAACTGCATTTTCTCTGGTGACCAAGCTTCCACTGACAAGGAAGAGGATTATATTCGT  
TATGCCCATGGTCTGATATCTGACTACATCCCTAAAGAATTAAGTGATGACTTATCTAAATACTTAAAGC  
TTCCAGAACCTTCAGCCTCATTGCCAAATCCTCCATCAAAGATGGCAGCACAAAGACAGAAAAGGGGCAA  
G

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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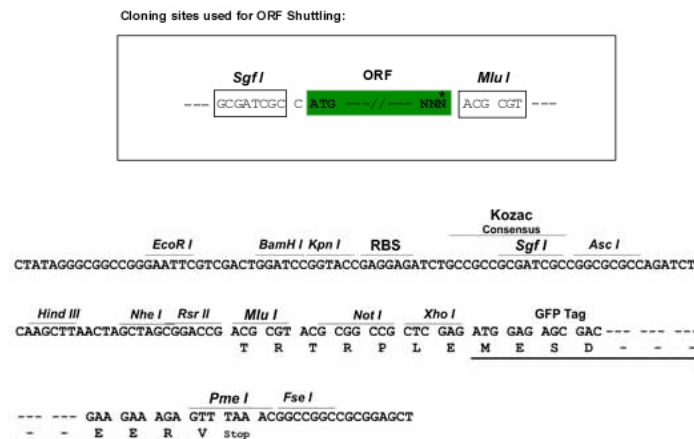
**Protein Sequence:** >RG226833 representing NM\_001142279  
 Red=Cloning site Green=Tags(s)

MAAGVDCGDGVGARQHVFLVSEYLDASKMKMKNGLMFVKLVNPCSGEGAIYLFNMCLQQLFEVKVFKEKH  
 HSWFINQSVQSGGLLHFATPVDPLFLLHYLIKADKEGKFQPLDQVVVDNVFPNCILLKLPGLEKLLHH  
 VTEKGNPEIDNKYYKYSKEKTLKWLKKNQTVAAKTNVNVSSRVQSTAFFSGDQASTDKEEDYIR  
 YAHGLISDYIPKELSDDLKYLKLPESASLPNPPSKMAAQRQKRGK

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001142279

**ORF Size:** 771 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:** [NM\\_001142279.2](#), [NP\\_001135751.1](#)

**RefSeq Size:** 1612 bp

**RefSeq ORF:** 774 bp

**Locus ID:** 79621

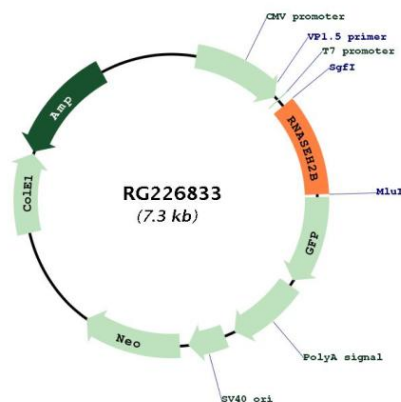
**UniProt ID:** [Q5TBB1](#)

**Cytogenetics:** 13q14.3

**Protein Pathways:** DNA replication

**Gene Summary:** RNase H2 is composed of a single catalytic subunit (A) and two non-catalytic subunits (B and C) and specifically degrades the RNA of RNA:DNA hybrids. The protein encoded by this gene is the non-catalytic B subunit of RNase H2, which is thought to play a role in DNA replication. Multiple transcript variants encoding different isoforms have been found for this gene. Defects in this gene are a cause of Aicardi-Goutieres syndrome type 2 (AGS2). [provided by RefSeq, Nov 2008]

## Product images:



Circular map for RG226833