

Product datasheet for **MC209320**

Rnps1 (NM_001080128) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rnps1 (NM_001080128) Mouse Untagged Clone
Tag: Tag Free
Symbol: Rnps1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >MC209320 representing NM_001080128
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTCCTTCTCCTACCAAACGCAAGGACCGATCTGATGAGAAGTCCAAGGATCGATCTAAAGATAAAG
GGGCCACTAAAGAGTCAAGTGAGAAGGATCGTGGCAGAGATAAGACTCGGAAGAGACGCAGTGCTTCAAG
CGGAAGCAGCAGTACCAGGTCTAGGTCCAGCTCCACCTCCAGCTCGGGCTCCAGCACCAGCACAGGCTCA
AGCAGTGGCTCCAGCTCGTCTCTGCATCCAGCCGCTCAGGAAGCTCCAGCACGTCCCGGAGCTCCAGTT
CTAGCAGCTCCTCCGGCTCCCCAAGCCCTTCTCGGCGCAGGCATGACAACAGGCGGCGCTCCCGCTCCAA
ATCCAAACCACCTAAAAGAGATGAAAAGAGAGGAAAAGGCGGAGCCCTTACCTAAACCAACCAAGTG
CACATTGGGAGGCTCACCAGGAATGTGACCAAGGATCATATCATGGAAATATTTTCTACTTACGGGAAAA
TTAAAATGATTGACATGCCTGTTGAGAGGATGCATCCTCACCTCTCCAAAGGCTATGCATATGTGGAGTT
TGAGAATCCCGATGAAGCAGAGAAGGCTCTGAAACACATGGATGGAGGACAAATTGATGGCCAAGAGATC
ACTGCTACTGCTGTGTTGGCACCTGGCTCGGCCACCACCTCGGCGATTAGCCCCCTAGGAGGATGC
TTCCACCACCTCCATGTGGCGTAGGTACCCCCACGGATGAGGAGAAGGTCTCGATCCCCAAGACGCAG
GTCCCCTGTGCGTAGGAGGTCTCGCTCTCTGGCCGCCGCCACAGGAGCCGATCCAGCTCCAACCTCC
TCCCGATAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001080128
Insert Size: 849 bp



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|-------------------------------|---|
| 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: | <u>NM_001080128.1</u> , <u>NP_001073597.1</u> |
| RefSeq Size: | 1631 bp |
| RefSeq ORF: | 849 bp |
| Locus ID: | 19826 |
| UniProt ID: | <u>Q99M28</u> |
| Cytogenetics: | 17 A3.3 |

Gene Summary:

Part of pre- and post-splicing multiprotein mRNP complexes. Auxiliary component of the splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junction on mRNAs. The EJC is a dynamic structure consisting of core proteins and several peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. Component of the ASAP and PSAP complexes which bind RNA in a sequence-independent manner and are proposed to be recruited to the EJC prior to or during the splicing process and to regulate specific excision of introns in specific transcription subsets. The ASAP complex can inhibit RNA processing during *in vitro* splicing reactions. The ASAP complex promotes apoptosis and is disassembled after induction of apoptosis. Enhances the formation of the ATP-dependent A complex of the spliceosome. Involved in both constitutive splicing and, in association with SRP54 and TRA2B/SFRS10, in distinctive modulation of alternative splicing in a substrate-dependent manner. Involved in the splicing modulation of BCL2L1/Bcl-X (and probably other apoptotic genes); specifically inhibits formation of proapoptotic isoforms such as Bcl-X(S); the activity is different from the established EJC assembly and function. Participates in mRNA 3'-end cleavage. Involved in UPF2-dependent nonsense-mediated decay (NMD) of mRNAs containing premature stop codons. Also mediates increase of mRNA abundance and translational efficiency. Binds spliced mRNA 20-25 nt upstream of exon-exon junctions (By similarity). [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (3) lacks two consecutive exons in the 5' region, which results in an alternate translation start codon, compared to variant 1. The resulting isoform (2) has a shorter N-terminus, compared to isoform 1.