

Product datasheet for RR201287

Rnps1 (NM 001011890) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Rnps1 (NM_001011890) Rat Tagged ORF Clone

Tag: Myc-DDK
Symbol: Rnps1

Mammalian Cell Neomycin

Selection:

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

ORF Nucleotide >RR201287 representing NM_001011890
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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

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

CN: techsupport@origene.cn



Protein Sequence: >RR201287 representing NM_001011890

Red=Cloning site Green=Tags(s)

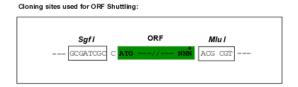
MDLSGVKKKSLLGVKENNKKSSTRAPSPTKRKDRSDEKSKDRSKDKGTTKESSEKDRGRDKTRKRRSASS GSSSTRSRSSSTSSGSSTSTGSSSGSSSSSASSRSGSSSTSRSSSSSSSGSPSPSRRRHDNRRRSRSK SKPPKRDEKERKRRSPSPKPTKVHIGRLTRNVTKDHIMEIFSTYGKIKMIDMPVERMHPHLSKGYAYVEF ENPDEAEKALKHMDGGQIDGQEITATAVLAPWPRPPPRRFSPPRRMLPPPPMWRRSPPRMRRRSRSPRRR SPVRRRSRSPGRRRHRSRSSSNSSR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



CTATAGGGCGGCCG	EcoRI GGAATTCGTC	Bami GACTGGAT	HI Kpn I	RBS	TCTGO	Cons	sensus Sgfi CGATCG	- c c F	YTG -		-
ORF	NNN	Miu i ACG CGT T R			Xhol C GAG	CAG Q		c.Tag	TCA S	GAA E	gag E
CAT CTG GCA GC	A AAT GAT	ATC CTG		Flag.Tag AAG GA K D	F GAC D		AT AAG	_	TAA stop	ACGG	se I

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

ACCN: NM_001011890

ORF Size: 915 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: <u>NM 001011890.1</u>, <u>NP 001011890.1</u>

RefSeq Size: 1853 bp **RefSeq ORF:** 918 bp

 Locus ID:
 287113

 UniProt ID:
 Q6AYK1

 Cytogenetics:
 10q12

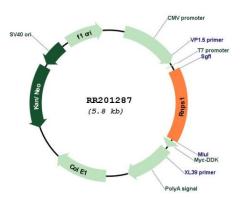
 MW:
 34.2 kDa

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 EIC 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 EIC 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]



Product images:



Circular map for RR201287