

RNPS1 Blocking Peptide (N-Term) Synthetic peptide Catalog # BP21998a

Specification

RNPS1 Blocking Peptide (N-Term) - Product Information

Primary Accession Other Accession <u>Q15287</u> <u>A6QR16, Q4R5N1, Q99M28, Q5NVM8, Q6AYK1</u>

RNPS1 Blocking Peptide (N-Term) - Additional Information

Gene ID 10921

Other Names RNA-binding protein with serine-rich domain 1, SR-related protein LDC2, RNPS1, LDC2

Target/Specificity The synthetic peptide sequence is selected from aa 31-44 of HUMAN RNPS1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RNPS1 Blocking Peptide (N-Term) - Protein Information

Name RNPS1

Synonyms LDC2

Function

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.

Cellular Location

Nucleus. Nucleus speckle. Cytoplasm. Note=Nucleocytoplasmic shuttling protein. Colocalizes with the core EJC, ALYREF/THOC4, NXF1 and UAP56 in the nucleus and nuclear speckles

Tissue Location Ubiquitous..

RNPS1 Blocking Peptide (N-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

RNPS1 Blocking Peptide (N-Term) - Images

RNPS1 Blocking Peptide (N-Term) - Background

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RNPS1 Blocking Peptide (N-Term) - References

Badolato J.,et al.Gene 166:323-327(1995). Loyer P.,et al.J. Cell Sci. 111:1495-1506(1998). Harada K.,et al.Submitted (MAY-2000) to the EMBL/GenBank/DDBJ databases. Ota T.,et al.Nat. Genet. 36:40-45(2004). Martin J.,et al.Nature 432:988-994(2004).