

## RNPS1 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21998a

## **Specification**

## RNPS1 Antibody (N-Term) - Product Information

Application WB,E
Primary Accession Q15287

Other Accession A6OR16, Q4R5N1, Q99M28, Q5NVM8, Q6AYK1

Reactivity Human

Predicted Bovine, Monkey, Mouse, Rat

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Calculated MW 34208

## RNPS1 Antibody (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

This RNPS1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 11-44 amino acids from the RNPS1.

#### **Dilution**

WB~~1:500-1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

RNPS1 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

## RNPS1 Antibody (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 (EIC) 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 EIC 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..

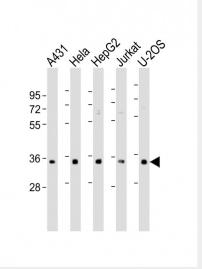
# RNPS1 Antibody (N-Term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# RNPS1 Antibody (N-Term) - Images





All lanes: Anti-RNPS1 Antibody (N-Term) at 1:500-1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: Hela whole cell lysate Lane 3: HepG2 whole cell lysate Lane 4: Jurkat whole cell lysate Lane 5: U-2OS whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 34 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

# RNPS1 Antibody (N-Term) - Background

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.

## RNPS1 Antibody (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).