

SF3A1 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP1932b

Specification

SF3A1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

Q15459

SF3A1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 10291

Other Names

Splicing factor 3A subunit 1, SF3a120, Spliceosome-associated protein 114, SAP 114, SF3A1, SAP114

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1932b was selected from the N-term region of human SF3A1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

SF3A1 Antibody (N-term) Blocking Peptide - Protein Information

Name SF3A1

Synonyms SAP114

Function

Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:10882114, PubMed:11533230, PubMed:32494006). The 17S U2 SnRNP complex (1) directly participates in early spliceosome assembly and (2) mediates recognition of the intron branch site during pre-mRNA splicing by promoting the selection of the pre-mRNA branch- site adenosine, the nucleophile for the first step of splicing (PubMed:10882114, PubMed:<a



href="http://www.uniprot.org/citations/11533230" target="_blank">11533230, PubMed:32494006). Within the 17S U2 SnRNP complex, SF3A1 is part of the SF3A subcomplex that contributes to the assembly of the 17S U2 snRNP, and the subsequent assembly of the pre-spliceosome 'E' complex and the pre-catalytic spliceosome 'A' complex (PubMed:10882114, PubMed:11533230). Involved in pre-mRNA splicing as a component of pre-catalytic spliceosome 'B' complexes (PubMed:29360106, PubMed:30315277).

Cellular LocationNucleus. Nucleus speckle

Tissue LocationUbiquitously expressed.

SF3A1 Antibody (N-term) Blocking Peptide - Protocols

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

• Blocking Peptides

SF3A1 Antibody (N-term) Blocking Peptide - Images

SF3A1 Antibody (N-term) Blocking Peptide - Background

SF3A1 is subunit 1 of the splicing factor 3a protein complex. The splicing factor 3a heterotrimer includes subunits 1, 2 and 3 and is necessary for the in vitro conversion of 15S U2 snRNP into an active 17S particle that performs pre-mRNA splicing. Subunit 1 belongs to the SURP protein family, named for the SURP (also called SWAP or Suppressor-of-White-APricot) motifs that are thought to mediate RNA binding. Subunit 1 has tandemly repeated SURP motifs in its amino-terminal half while its carboxy-terminal half contains a proline-rich region and a ubiquitin-like domain. Binding studies with truncated subunit 1 derivatives demonstrated that the two SURP motifs are necessary for binding to subunit 3 while contacts with subunit 2 may occur through sequences carboxy-terminal to the SURP motifs.

SF3A1 Antibody (N-term) Blocking Peptide - References

Nesic, D., et al., Mol. Cell. Biol. 21(19):6406-6417 (2001).Das, R., et al., Mol. Cell 5(5):779-787 (2000).Kramer, A., et al., J. Cell Biol. 145(7):1355-1368 (1999).Rain, J.C., et al., RNA 2(6):535-550 (1996).Kramer, A., et al., RNA 1(3):260-272 (1995).