

SF3B1 Antibody (N-term) Blocking peptide

Synthetic peptide Catalog # BP13754a

Specification

SF3B1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession

075533

SF3B1 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 23451

Other Names

Splicing factor 3B subunit 1, Pre-mRNA-splicing factor SF3b 155 kDa subunit, SF3b155, Spliceosome-associated protein 155, SAP 155, SF3B1, SAP155

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13754a was selected from the N-term region of SF3B1. 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.

SF3B1 Antibody (N-term) Blocking peptide - Protein Information

Name SF3B1 {ECO:0000303|PubMed:30567737, ECO:0000312|HGNC:HGNC:10768}

Function

Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:12234937, PubMed:27720643, PubMed:27720643, PubMed:32494006, PubMed:34822310). 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:32494006, PubMed:34822310). Within the 17S U2 SnRNP complex, SF3B1 is part of the SF3B subcomplex, which is required for 'A' complex



assembly formed by the stable binding of U2 snRNP to the branchpoint sequence in pre-mRNA (PubMed:12234937). Sequence independent binding of SF3A and SF3B subcomplexes upstream of the branch site is essential, it may anchor U2 snRNP to the pre-mRNA (PubMed:12234937). May also be involved in the assembly of the 'E' complex (PubMed:10882114). Also acts as a component of the minor spliceosome, which is involved in the splicing of U12-type introns in pre-mRNAs (PubMed:<a href="http://www.uniprot.org/citations/15146077"

target="_blank">15146077, PubMed:33509932). Together with other U2 snRNP complex components may also play a role in the selective processing of microRNAs (miRNAs) from the long primary miRNA transcript, pri-miR-17-92 (By similarity).

Cellular Location

Nucleus. Nucleus speckle. Note=During mitosis, transiently dispersed from the nuclear speckles to the cytoplasm

SF3B1 Antibody (N-term) Blocking peptide - Protocols

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

• Blocking Peptides

SF3B1 Antibody (N-term) Blocking peptide - Images

SF3B1 Antibody (N-term) Blocking peptide - Background

This gene encodes subunit 1 of the splicing factor 3bprotein complex. Splicing factor 3b, together with splicing factor3a and a 12S RNA unit, forms the U2 small nuclearribonucleoproteins complex (U2 snRNP). The splicing factor 3b/3acomplex binds pre-mRNA upstream of the intron's branch site in asequence independent manner and may anchor the U2 snRNP to thepre-mRNA. Splicing factor 3b is also a component of the minorU12-type spliceosome. The carboxy-terminal two-thirds of subunit 1have 22 non-identical, tandem HEAT repeats that form rod-like,helical structures. Alternative splicing results in multipletranscript variants encoding different isoforms. [provided byRefSeq].

SF3B1 Antibody (N-term) Blocking peptide - References

Corsini, L., et al. J. Biol. Chem. 284(1):630-639(2009)Tanuma, N., et al. J. Biol. Chem. 283(51):35805-35814(2008)Pessa, H.K., et al. Proc. Natl. Acad. Sci. U.S.A. 105(25):8655-8660(2008)Kuwasako, K., et al. Proteins 71(4):1617-1636(2008)Avila, M.L., et al. Biochem. Biophys. Res. Commun. 364(1):26-32(2007)