

SF3B3 Antibody (C-term) Blocking peptide Synthetic peptide

Catalog # BP12703b

Specification

SF3B3 Antibody (C-term) Blocking peptide - Product Information

Primary Accession

<u>Q15393</u>

SF3B3 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 23450

Other Names

Splicing factor 3B subunit 3, Pre-mRNA-splicing factor SF3b 130 kDa subunit, SF3b130, STAF130, Spliceosome-associated protein 130, SAP 130, SF3B3, KIAA0017, SAP130

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.

SF3B3 Antibody (C-term) Blocking peptide - Protein Information

Name SF3B3

Synonyms KIAA0017, SAP130 {ECO:0000303|PubMed:104

Function

Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:10490618, PubMed:10882114, PubMed:12234937, PubMed:27720643, PubMed:28781166, PubMed:28781166, 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:1234937, PubMed:1234937, PubMed:32494006, PubMed:32494006, PubMed:32494006, PubMed:32494006, PubMed:32494006, PubMed:34822310). Within the



17S U2 SnRNP complex, SF3B3 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, PubMed:27720643). 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).

Cellular Location Nucleus

SF3B3 Antibody (C-term) Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

SF3B3 Antibody (C-term) Blocking peptide - Images

SF3B3 Antibody (C-term) Blocking peptide - Background

This gene encodes subunit 3 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. Subunit 3 has also been identified as acomponent of the STAGA (SPT3-TAF(II)31-GCN5L acetylase)transcription coactivator-HAT (histone acetyltransferase) complex, and the TFTC (TATA-binding-protein-free TAF(II)-containingcomplex). These complexes may function in chromatin modification, transcription, splicing, and DNA repair.

SF3B3 Antibody (C-term) Blocking peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Will, C.L., et al. RNA 10(6):929-941(2004)Cavusoglu, N., et al. Proteomics 3(2):217-223(2003)Will, C.L., et al. EMBO J. 21(18):4978-4988(2002)Martinez, E., et al. Mol. Cell. Biol. 21(20):6782-6795(2001)