

SF3B14 Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP4807b

Specification

SF3B14 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

09Y3B4

SF3B14 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 51639

Other Names

Splicing factor 3B subunit 6, Pre-mRNA branch site protein p14, SF3b 14 kDa subunit, SF3B14a, Spliceosome-associated protein, 14-kDa, Splicing factor 3b, subunit 6, 14kDa, SF3B6, SAP14, SF3B14A

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.

SF3B14 Antibody (C-term) Blocking Peptide - Protein Information

Name SF3B6

Synonyms SAP14, SF3B14, SF3B14A

Function

Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:27720643, PubMed:12234937, 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:12234937, PubMed:32494006, PubMed:32494006). Within the 17S U2 SnRNP complex, SF3B6 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). Within the 17S U2 SnRNP complex, SF3B6 directly contacts the pre-mRNA branch site adenosine for the first catalytic step of splicing (PubMed:16432215" target="_blank">16432215). SF3B6 stabilizes the intron branch site-U2 snRNA duplex, thereby promoting- binding of introns with poor sequence complementarity (PubMed:34822310). Also acts as a component of the minor spliceosome, which is involved in the splicing of U12-type introns in pre-mRNAs (PubMed:15146077/a>, PubMed:33509932/a>).

Cellular Location Nucleus

SF3B14 Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides

SF3B14 Antibody (C-term) Blocking Peptide - Images

SF3B14 Antibody (C-term) Blocking Peptide - Background

SF3B14 encodes a 14 kDa protein subunit of the splicing factor 3b complex. Splicing factor 3b associates with both the U2 and U11/U12 small nuclear ribonucleoprotein complexes (U2 snRNP) of spliceosomes. This 14 kDa protein interacts directly with subunit 1 of the splicing factor 3b complex. This 14 kDa protein also interacts directly with the adenosine that carries out the first transesterification step of splicing at the pre-mRNA branch site.

SF3B14 Antibody (C-term) Blocking Peptide - References

Hosgood, H.D. III, et al. Occup Environ Med 66(12):848-853(2009)Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) Schellenberg, M.J., et al. Proc. Natl. Acad. Sci. U.S.A. 103(5):1266-1271(2006)