

#### SF3B4 Antibody(Center) Blocking peptide Synthetic peptide

Catalog # BP19396c

## Specification

# SF3B4 Antibody(Center) Blocking peptide - Product Information

Primary Accession

## <u>Q15427</u>

# SF3B4 Antibody(Center) Blocking peptide - Additional Information

Gene ID 10262

**Other Names** Splicing factor 3B subunit 4, Pre-mRNA-splicing factor SF3b 49 kDa subunit, SF3b50, Spliceosome-associated protein 49, SAP 49, SF3B4, SAP49

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.

# SF3B4 Antibody(Center) Blocking peptide - Protein Information

Name SF3B4

Synonyms SAP49

### Function

Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:<a

href="http://www.uniprot.org/citations/10882114" target="\_blank">10882114</a>, PubMed:<a href="http://www.uniprot.org/citations/12234937" target="\_blank">12234937</a>, PubMed:<a href="http://www.uniprot.org/citations/27720643" target="\_blank">27720643</a>, PubMed:<a href="http://www.uniprot.org/citations/27720643" target="\_blank">27720643</a>, PubMed:<a href="http://www.uniprot.org/citations/32494006" target="\_blank">32494006</a>). 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:<a href="http://www.uniprot.org/citations/12234937" target="\_blank">12234937</a>, PubMed:<a href="http://www.uniprot.org/citations/32494006" target="\_blank">32494006</a>). Within the 17S U2 SnRNP complex, SF3B4 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:<a href="http://www.uniprot.org/citations/12234937" target="\_blank">12234937</a>, PubMed:<a href="http://www.uniprot.org/citations/12234937" target="\_blank">2234937</a>, PubMed:<a href="http://www.uniprot.org/citations/32494006" target="\_blank">2234937</a>, PubMed:<a href="http://www.uniprot.org/citations/32494006" target="\_blank">2234937</a>, PubMed:<a href="http://www.uniprot.org/citations/12234937" target="\_blank">2234937</a>, PubMed:<a href="http://www.uniprot.org/citations/12234937" target="\_blank">27720643</a>,



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:<a

href="http://www.uniprot.org/citations/12234937" target="\_blank">12234937</a>). May also be involved in the assembly of the 'E' complex (PubMed:<a

href="http://www.uniprot.org/citations/10882114" target="\_blank">10882114</a>). 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</a>, PubMed:<a href="http://www.uniprot.org/citations/33509932" target="\_blank">33509932</a>).

**Cellular Location** Nucleus

## SF3B4 Antibody(Center) Blocking peptide - Protocols

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

#### <u>Blocking Peptides</u>

## SF3B4 Antibody(Center) Blocking peptide - Images

## SF3B4 Antibody(Center) Blocking peptide - Background

This gene encodes one of four subunits of the splicingfactor 3B. The protein encoded by this gene cross-links to a regionin the pre-mRNA immediately upstream of the branchpoint sequence inpre-mRNA in the prespliceosomal complex A. It also may be involved in the assembly of the B, C and E spliceosomal complexes. Inaddition to RNA-binding activity, this protein interacts directlyand highly specifically with subunit 2 of the splicing factor 3B. This protein contains two N-terminal RNA-recognition motifs (RRMs), consistent with the observation that it binds directly to pre-mRNA.

### SF3B4 Antibody(Center) Blocking peptide - References

Gudbjartsson, D.F., et al. Nat. Genet. 40(5):609-615(2008)Rikova, K., et al. Cell 131(6):1190-1203(2007)Watanabe, H., et al. J. Biol. Chem. 282(28):20728-20738(2007)Wu, C., et al. Proteomics 7(11):1775-1785(2007)Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :