

SF3B2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16199c

Specification

SF3B2 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region WB,E <u>Q13435</u> <u>NP_006833.2</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 539-568

SF3B2 Antibody (Center) - Additional Information

Gene ID 10992

Other Names

Splicing factor 3B subunit 2, Pre-mRNA-splicing factor SF3b 145 kDa subunit, SF3b145, SF3b150, Spliceosome-associated protein 145, SAP 145, SF3B2, SAP145

Target/Specificity

This SF3B2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 539-568 amino acids from the Central region of human SF3B2.

Dilution WB~~1:2000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SF3B2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SF3B2 Antibody (Center) - Protein Information

Name SF3B2

Synonyms SAP145



Function Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:<u>12234937</u>, PubMed:<u>32494006</u>, PubMed:<u>34822310</u>). 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:<u>12234937</u>, PubMed:<u>32494006</u>, PubMed:<u>34822310</u>). Within the 17S U2 SnRNP complex, SF3B2 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:<u>12234937</u>, PubMed:<u>27720643</u>). 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:<u>12234937</u>). May also be involved in the assembly of the 'E' complex (PubMed:<u>10882114</u>). Also acts as a component of the minor spliceosome, which is involved in the splicing of U12-type introns in pre-mRNAs (PubMed:<u>15146077</u>, PubMed:<u>33509932</u>).

Cellular Location Nucleus. Nucleus speckle

SF3B2 Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SF3B2 Antibody (Center) - Images



All lanes : Anti-SF3B2 Antibody (Center) at 1:2000 dilution Lane 1: 293 whole cell lysate Lane 2: A431 whole cell lysate Lane 3: A549 whole cell lysate Lane 4: Hela whole cell lysate Lane 5: mouse spleen lysate Lane 6: mouse testis lysate Lane 7: rat lung lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution.



Predicted band size : 100 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

SF3B2 Antibody (Center) - Background

This gene encodes subunit 2 of the splicing factor 3b protein complex. Splicing factor 3b, together with splicing factor 3a and a 12S RNA unit, forms the U2 small nuclear ribonucleoproteins complex (U2 snRNP). The splicing factor 3b/3a complex binds pre-mRNA upstream of the intron's branch site in a sequence-independent manner and may anchor the U2 snRNP to the pre-mRNA. Splicing factor 3b is also a component of the minor U12-type spliceosome. Subunit 2 associates with pre-mRNA upstream of the branch site at the anchoring site. Subunit 2 also interacts directly with subunit 4 of the splicing factor 3b complex. Subunit 2 is a highly hydrophilic protein with a proline-rich N-terminus and a glutamate-rich stretch in the C-terminus. [provided by RefSeq].

SF3B2 Antibody (Center) - References

Matsuoka, S., et al. Science 316(5828):1160-1166(2007) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) : Olsen, J.V., et al. Cell 127(3):635-648(2006) Olsen, J.V., et al. Cell 127(3):635-648(2006) Terada, Y., et al. Mol. Cell. Biol. 26(21):8149-8158(2006) **SF3B2 Antibody (Center) - Citations**

• <u>Cellular Cleavage and Polyadenylation Specificity Factor 6 (CPSF6) Mediates Nuclear Import</u> of Human Bocavirus 1 NP1 Protein and Modulates Viral Capsid Protein Expression