10320 Camino Santa Fe, Suite G San Diego, CA 92121 Tel: 858.875.1900 Fax: 858.875.1999



SF3B1 Antibody

Rabbit mAb Catalog # AP91713

Product Information

Application WB, IHC, IF, FC, ICC, IHF

Primary Accession 075533

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names Hsh 155; MDS; PRP10; PRPF10; SAP155; SF3B 1; SF3b155;

Isotype Rabbit IgG Host Rabbit 145830 Calculated MW

Additional Information

Dilution WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:500

Purification Affinity-chromatography

A synthesized peptide derived from human SF3B1 **Immunogen**

Description SF3B1 is subunit 1 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.

Storage Condition and Buffer

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

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: 32494006,

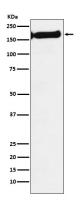
PubMed:34822310). The 17S U2 SnRNP complex (1) directly participates in early spliceosome assembly and (2) mediates recognition of the intron branch site during pre-mRNA splicing by promoting the selection of the pre-mRNA

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: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

Images



Western blot analysis of SF3B1 expression in Jurkat cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.