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SF3B1 Antibody

Rabbit mAb
Catalog # AP91713

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	O75533
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	Hsh 155; MDS; PRP10; PRPF10; SAP155; SF3B 1; SF3b155;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	145830

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
Immunogen	A synthesized peptide derived from human SF3B1
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

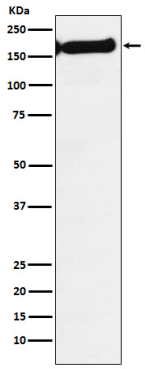
Name	SF3B1 {ECO:0000303|PubMed:30567737, ECO:0000312|HGNC:HGNC:10768}
Function	Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:12234937, PubMed:27720643, PubMed:32494006, PubMed:34822310, PubMed:36104565). 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, PubMed:36104565). 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, PubMed:36104565). 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.

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