

SF3B1 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13754a

Specification

SF3B1 Antibody (N-term) - Product Information

Application	WB, IHC-P,E
Primary Accession	O75533
Other Accession	O57683 , Q99NB9 , NP_036565.2
Reactivity	Human, Mouse
Predicted	Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	374-402

SF3B1 Antibody (N-term) - Additional Information

Gene ID 23451

Other Names

Splicing factor 3B subunit 1, Pre-mRNA-splicing factor SF3b 155 kDa subunit, SF3b155, Spliceosome-associated protein 155, SAP 155, SF3B1, SAP155

Target/Specificity

This SF3B1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 374-402 amino acids from the N-terminal region of human SF3B1.

Dilution

WB~~1:2000
IHC-P~~1:25

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

SF3B1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SF3B1 Antibody (N-term) - 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

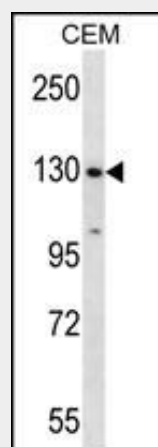
Nucleus. Nucleus speckle. Note=During mitosis, transiently dispersed from the nuclear speckles to the cytoplasm

SF3B1 Antibody (N-term) - Protocols

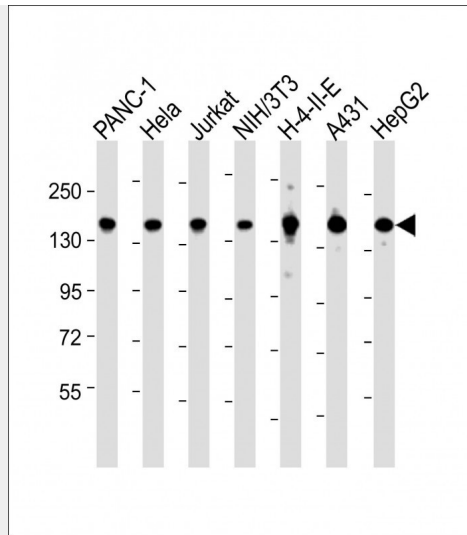
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

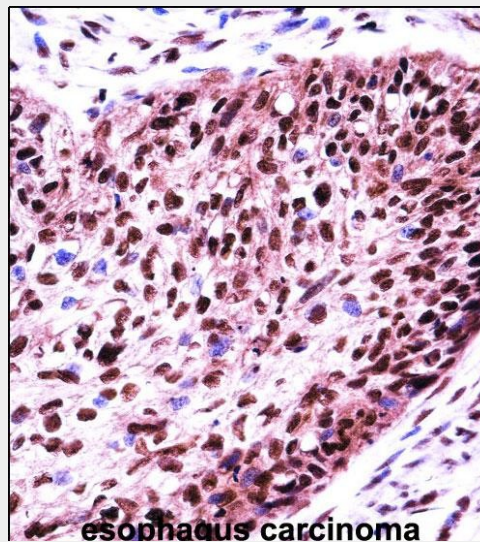
SF3B1 Antibody (N-term) - Images



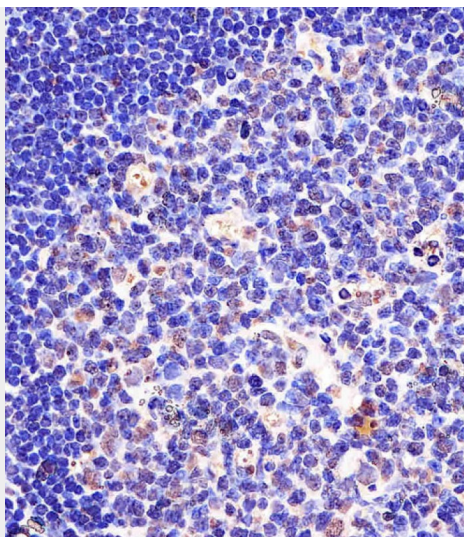
SF3B1 Antibody (N-term) (Cat. #AP13754a) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the SF3B1 antibody detected the SF3B1 protein (arrow).



All lanes : Anti-SF3B1 Antibody (N-term) at 1:2000 dilution Lane 1: PANC-1 whole cell lysate Lane 2: HeLa whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: NIH/3T3 whole cell lysate Lane 5: H-4-II-E whole cell lysate Lane 6: A431 whole cell lysate Lane 7: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 146 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



SF3B1 Antibody (N-term) (AP13754a) immunohistochemistry analysis in formalin fixed and paraffin embedded human esophagus carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of SF3B1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



AP13754a staining SF3B1 in human tonsil tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

SF3B1 Antibody (N-term) - Background

This gene encodes 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. Splicing factor 3b is also a component of the minor U12-type spliceosome. The carboxy-terminal two-thirds of subunit 1 have 22 non-identical, tandem HEAT repeats that form rod-like, helical structures. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq].

SF3B1 Antibody (N-term) - References

Corsini, L., et al. *J. Biol. Chem.* 284(1):630-639(2009)
Tanuma, N., et al. *J. Biol. Chem.* 283(51):35805-35814(2008)
Pessa, H.K., et al. *Proc. Natl. Acad. Sci. U.S.A.* 105(25):8655-8660(2008)
Kuwasako, K., et al. *Proteins* 71(4):1617-1636(2008)
Avila, M.L., et al. *Biochem. Biophys. Res. Commun.* 364(1):26-32(2007)