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Anti-SAP155 Antibody

Catalog # AP51507

Product Information

Application	WB, IF/IC
Primary Accession	O75533
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	145830

Additional Information

Gene ID	23451
Other Names	SAP155; Splicing factor 3B subunit 1; Pre-mRNA-splicing factor SF3b 155 kDa subunit; SF3b155; Spliceosome-associated protein 155; SAP 155
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human SAP155. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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

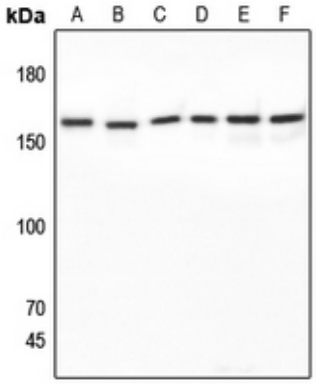
component of the minor spliceosome, which is involved in the splicing of U12-type introns in pre-mRNAs (PubMed:15146077, PubMed:33509932). Together with other U2 snRNP complex components may also play a role in the selective processing of microRNAs (miRNAs) from the long primary miRNA transcript, pri-miR-17-92 (By similarity).

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

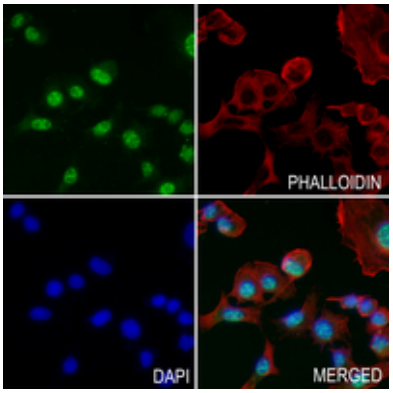
References

Wang C.,et al.Genes Dev. 12:1409-1414(1998).
Woessner J.,et al.Submitted (SEP-1998) to the EMBL/GenBank/DDBJ databases.
Hillier L.W.,et al.Nature 434:724-731(2005).
Yu W.,et al.Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
Das R.,et al.Mol. Cell 5:779-787(2000).

Images



Western blot analysis of SAP155 expression in HEK293T (A), Hela (B), U2OS (C), mouse liver (D), rat lung (E), rat liver (F) whole cell lysates. (Predicted band size: 145 kD; Observed band size: 155 kD)



Immunofluorescent analysis of SAP155 staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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