

SAP14 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51508

Product Information

Application	WB
Primary Accession	Q9Y3B4
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	14585

Additional Information

Gene ID	51639
Other Names	Splicing factor 3B subunit 6, Pre-mRNA branch site protein p14, SF3b 14 kDa subunit, SF3B14a, Spliceosome-associated protein, 14-kDa, Splicing factor 3b, subunit 6, 14kDa, SF3B6, SAP14, SF3B14, SF3B14A
Target/Specificity	KLH conjugated synthetic peptide derived from human SAP14
Dilution	WB~~ 1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	SF3B6
Synonyms	SAP14, SF3B14, SF3B14A
Function	<p>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:12234937, PubMed:32494006, PubMed:34822310). Within the 17S U2 SnRNP complex, SF3B6 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:27720643). Sequence independent binding of SF3A and SF3B subcomplexes upstream of the branch site is essential, it may anchor U2 snRNP to the pre-mRNA</p>

(PubMed:[12234937](#)). Within the 17S U2 SnRNP complex, SF3B6 directly contacts the pre-mRNA branch site adenosine for the first catalytic step of splicing (PubMed:[16432215](#)). SF3B6 stabilizes the intron branch site-U2 snRNA duplex, thereby promoting- binding of introns with poor sequence complementarity (PubMed:[34822310](#)). 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](#)).

Cellular Location

Nucleus

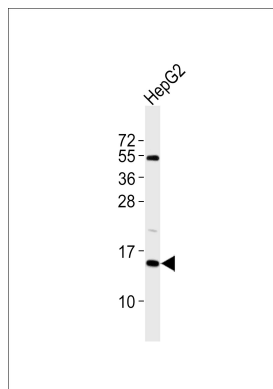
Background

Necessary for the splicing of pre-mRNA. Directly contacts the pre-mRNA branch site adenosine for the first catalytic step of splicing. Enters the spliceosome and associates with the pre-mRNA branch site as part of the 17S U2 or, in the case of the minor spliceosome, as part of the 18S U11/U12 snRNP complex, and thus may facilitate the interaction of these snRNP with the branch sites of U2 and U12 respectively.

References

Will C.L.,et al.EMBO J. 20:4536-4546(2001).
Lai C.-H.,et al.Genome Res. 10:703-713(2000).
Zhang Q.-H.,et al.Genome Res. 10:1546-1560(2000).
Hu R.-M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000).
Will C.L.,et al.EMBO J. 21:4978-4988(2002).

Images



Anti-SAP14 Antibody at 1:1000 dilution + HepG2 whole cell lysates. Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 15 kDa. Blocking/Dilution buffer: 5% NFD/MTBST.

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