

SAP14 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51508**Specification**

SAP14 Antibody - Product Information

Application	WB
Primary Accession	O9Y3B4
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	14 KDa
Antigen Region	61 - 120

SAP14 Antibody - 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

SAP14 Antibody - Protein Information**Name** SF3B6**Synonyms** SAP14, SF3B14, SF3B14A**Function**

Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed: 27720643, PubMed: 12234937, 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 (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

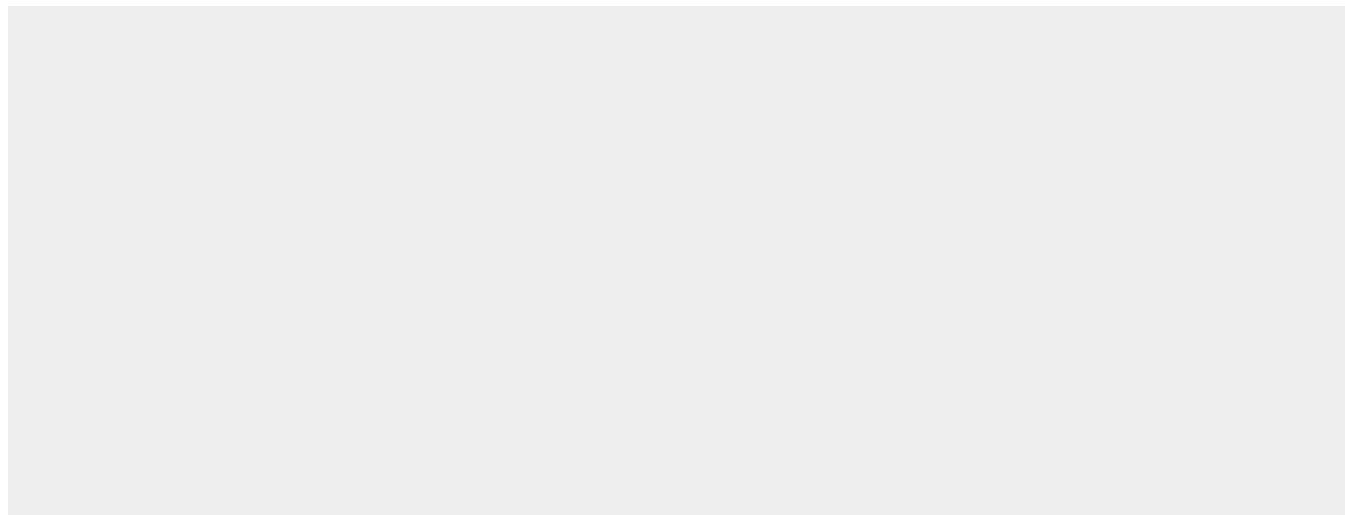
Nucleus

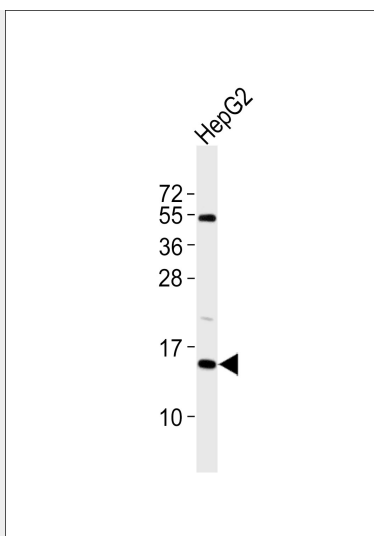
SAP14 Antibody - Protocols

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](#)

SAP14 Antibody - 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% NFDM/TBST.

SAP14 Antibody - 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.

SAP14 Antibody - 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).