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# SAP 14 Polyclonal Antibody

Catalog # AP72393

#### **Product Information**

Application WB Primary Accession Q9Y3B4

Reactivity Human, Mouse

HostRabbitClonalityPolyclonalCalculated MW14585

#### **Additional Information**

**Gene ID** 51639

Other Names SF3B14; CGI-110; HSPC175; HT006; Pre-mRNA branch site protein p14; SF3b

14 kDa subunit

**Dilution** WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other

applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **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: 12234937, PubMed: 27720643, PubMed: 32494006,

PubMed:<u>34822310</u>). 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:<u>16432215</u>). SF3B6 stabilizes the intron branch site-U2 snRNA duplex, thereby promoting- binding of introns with poor sequence complementarity (PubMed:<u>34822310</u>). Also acts as a component of the minor spliceosome, which is involved in the splicing of U12-type introns in pre-mRNAs (PubMed:<u>15146077</u>, PubMed:<u>33509932</u>).

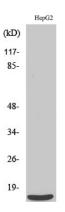
**Cellular Location** 

**Nucleus** 

## **Background**

Involved in pre-mRNA splicing as a component of the splicing factor SF3B complex (PubMed: 27720643). SF3B complex is required for 'A' complex assembly formed by the stable binding of U2 snRNP to the branchpoint sequence (BPS) in pre-mRNA (PubMed:12234937). Directly contacts the pre-mRNA branch site adenosine for the first catalytic step of splicing (PubMed:16432215). 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 (PubMed:16432215).

### **Images**



Western Blot analysis of various cells using SAP 14 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

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