

**SAP 49 Polyclonal Antibody**  
**Catalog # AP72394****Specification**

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**SAP 49 Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">Q15427</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

**SAP 49 Polyclonal Antibody - Additional Information****Gene ID** 10262**Other Names**

SF3B4; SAP49; Splicing factor 3B subunit 4; Pre-mRNA-splicing factor SF3b 49 kDa subunit; SF3b50; Spliceosome-associated protein 49; SAP 49

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.

IHC-P~~N/A

**Format**

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

**Storage Conditions**

-20°C

**SAP 49 Polyclonal Antibody - Protein Information****Name** SF3B4**Synonyms** SAP49**Function**

Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:<a href="http://www.uniprot.org/citations/10882114" target="\_blank">10882114</a>, PubMed:<a href="http://www.uniprot.org/citations/12234937" target="\_blank">12234937</a>, PubMed:<a href="http://www.uniprot.org/citations/27720643" target="\_blank">27720643</a>, PubMed:<a href="http://www.uniprot.org/citations/32494006" target="\_blank">32494006</a>). 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:<a href="http://www.uniprot.org/citations/12234937" target="\_blank">12234937</a>, PubMed:<a href="http://www.uniprot.org/citations/32494006" target="\_blank">32494006</a>). Within the

17S U2 SnRNP complex, SF3B4 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:<a href="http://www.uniprot.org/citations/12234937" target="\_blank">12234937</a>, PubMed:<a href="http://www.uniprot.org/citations/27720643" target="\_blank">27720643</a>). 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:<a href="http://www.uniprot.org/citations/12234937" target="\_blank">12234937</a>). May also be involved in the assembly of the 'E' complex (PubMed:<a href="http://www.uniprot.org/citations/10882114" target="\_blank">10882114</a>). Also acts as a component of the minor spliceosome, which is involved in the splicing of U12-type introns in pre-mRNAs (PubMed:<a href="http://www.uniprot.org/citations/15146077" target="\_blank">15146077</a>, PubMed:<a href="http://www.uniprot.org/citations/33509932" target="\_blank">33509932</a>).

### Cellular Location

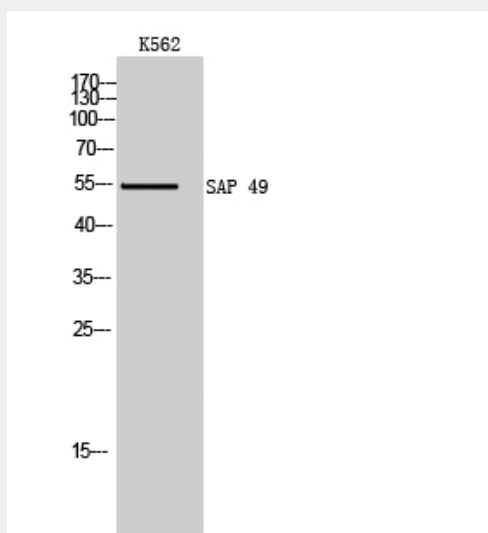
Nucleus

### SAP 49 Polyclonal Antibody - Protocols

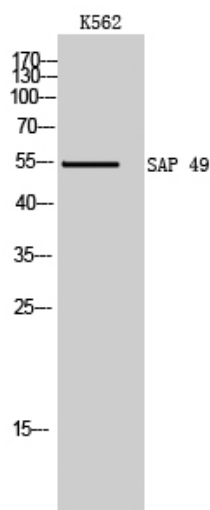
Provided below are standard protocols that you may find useful for product applications.

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

### SAP 49 Polyclonal Antibody - Images



Western Blot analysis of K562 cells using SAP 49 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).



Western Blot analysis of K562 cells using SAP 49 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Invent biotech, MN, USA).

#### **SAP 49 Polyclonal Antibody - 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. Sequence independent binding of SF3A/SF3B complex 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. SF3B4 has been found in complex 'B' and 'C' as well (PubMed:10882114). Belongs also to the minor U12-dependent spliceosome, which is involved in the splicing of rare class of nuclear pre-mRNA intron (PubMed:15146077).