

SAP 49 Polyclonal Antibody

Catalog # AP72394

Specification

SAP 49 Polyclonal Antibody - Product Information

Application WB
Primary Accession O15427

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.

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:10882114, PubMed:12234937, PubMed:27720643, PubMed:32494006). 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). 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: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). 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:<a href="http://www.uniprot.org/citations/15146077"

 $target="_blank">15146077, PubMed:33509932).$

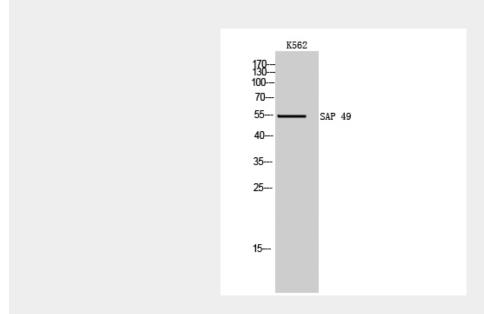
Cellular LocationNucleus

SAP 49 Polyclonal Antibody - Protocols

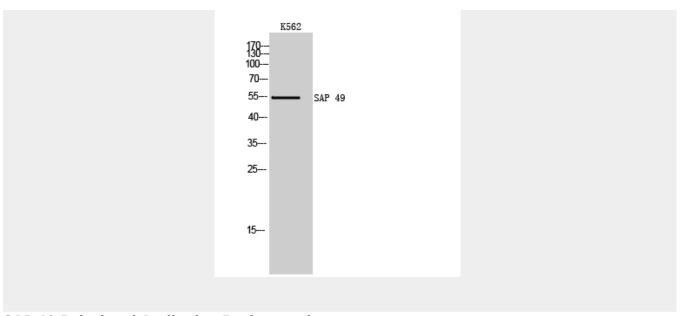
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

SAP 49 Polyclonal Antibody - Images







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).