

# Anti-SAP49 Antibody

Rabbit polyclonal antibody to SAP49 Catalog # AP60631

#### **Product Information**

Application WB, IHC
Primary Accession Q15427
Other Accession 080ZY9

**Reactivity** Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 44386

### **Additional Information**

**Gene ID** 10262

Other Names SAP49; Splicing factor 3B subunit 4; Pre-mRNA-splicing factor SF3b 49 kDa

subunit; SF3b50; Spliceosome-associated protein 49; SAP 49

**Target/Specificity** KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human SAP49. The exact sequence is proprietary.

**Dilution** WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC

(1/100 - 1/200)

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

#### **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:<u>12234937</u>, PubMed:<u>32494006</u>). 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:15146077, PubMed:33509932).

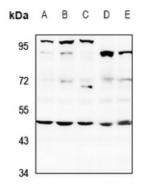
**Cellular Location** 

**Nucleus** 

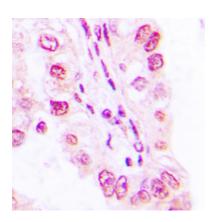
# **Background**

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SAP49. The exact sequence is proprietary.

## **Images**



Western blot analysis of SAP49 expression in LO2 (A), A549 (B), HEK293T (C), CT26 (D), PC12 (E) whole cell lysates.



Immunohistochemical analysis of SAP49 staining in human lung formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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