

SAP 49 (C-20): sc-14276

BACKGROUND

SF3b is a U2 snRNP-associated protein complex essential for spliceosome assembly. SF3b contains the spliceosomal proteins SAP 49, SAP 130, SAP 145, and SAP 155. SAP 130, SAP 145, and SAP 155 are present in a protein complex in HeLa nuclear extracts and associate with one another. While SAP 155 and SAP 130 interact with each other (directly or indirectly) within this complex, SAP 49 and SAP 145 are known to interact directly with each other. Unexpectedly, the SAP 49-SAP 145 protein-protein interaction requires the amino-terminus of SAP 49, which contains two RNA-recognition motifs. The observation that SAP 49 and SAP 145 interact directly with both U2 snRNP and the pre-mRNA suggests that this protein complex plays a role in tethering U2 snRNP to the branch site.

CHROMOSOMAL LOCATION

Genetic locus: SF3B4 (human) mapping to 1q21.2; Sf3b4 (mouse) mapping to 3 F2.1.

SOURCE

SAP 49 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SAP 49 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-14276 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

SAP 49 (C-20) is recommended for detection of SAP 49 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SAP 49 (C-20) is also recommended for detection of SAP 49 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for SAP 49 siRNA (h): sc-38313, SAP 49 siRNA (m): sc-153218, SAP 49 shRNA Plasmid (h): sc-38313-SH, SAP 49 shRNA Plasmid (m): sc-153218-SH, SAP 49 shRNA (h) Lentiviral Particles: sc-38313-V and SAP 49 shRNA (m) Lentiviral Particles: sc-153218-V.

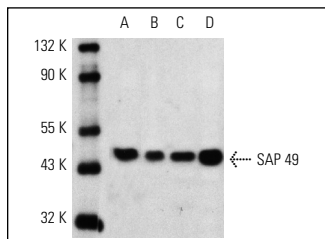
Molecular Weight of SAP 49: 49 kDa.

Positive Controls: SAP 49 (m2): 293T Lysate: sc-123348, MCF7 whole cell lysate: sc-2206 or SW480 cell lysate: sc-2219.

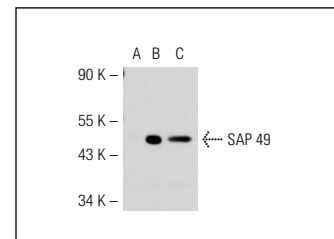
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



SAP 49 (C-20): sc-14276. Western blot analysis of SAP 49 expression in MCF7 (A), PC-3 (B), SW480 (C) and HeLa (D) whole cell lysates.



SAP 49 (C-20): sc-14276. Western blot analysis of SAP 49 expression in non-transfected 293T: sc-117752 (A), mouse SAP 49 transfected 293T: sc-123348 (B) and HeLa (C) whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products



Try **SAP 49 (G-12): sc-365570** or **SAP 49 (G-7): sc-398944**, our highly recommended monoclonal alternatives to SAP 49 (C-20).