SANTA CRUZ BIOTECHNOLOGY, INC.

SAP 61 (P-17): sc-68789

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

SAP 61, also known as SF3A3 (splicing factor 3A subunit 3), PRP9, PRPF9 or SF3a60, is a 501 amino acid protein that contains one matrin-type zinc finger and belongs to the SF3A3 family. Localized to the nucleus, SAP 61 is a subunit of the SF3A splicing factor, a heterotrimeric complex comprised of three subunits that act in tandem to mediate the binding of U2 snRNP to the branch-point sequence (BPS) in pre-mRNA. The SF3A complex is necessary for the conversion of 15S U2 snRNP into the active 17S protein that performs directly in pre-mRNA splicing events. Functioning as the third subunit of the complex, SAP 61 interacts with subunit 1 (SAP 114) via its N-terminus, while simultaneously binding to 15S U2 snRNP via its zinc finger domain. As is the case for all SF3A subunits, SAP 61 is essential for prespliceosome assembly and cell viability. In addition, a pseudogene exists for SAP 61 on chromosome 20.

REFERENCES

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5. Krämer, A., Ferfoglia, F., Huang, C.J., Mulhaupt, F., Nesic, D. and Tanackovic, G. 2005. Structure-function analysis of the U2 SnRNP-associated splicing factor SF3a. Biochem. Soc. Trans. 33: 439-442.
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CHROMOSOMAL LOCATION

Genetic locus: SF3A3 (human) mapping to 1p34.3; Sf3a3 (mouse) mapping to 4 D2.2.

SOURCE

SAP 61 (P-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SAP 61 of human origin.

RESEARCH USE

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

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-68789 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-68789 X, 200 µg/0.1 ml.

APPLICATIONS

SAP 61 (P-17) is recommended for detection of SAP 61 of mouse, rat 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 61 (P-17) is also recommended for detection of SAP 61 in additional species, including equine, canine, bovine, porcine and avian.

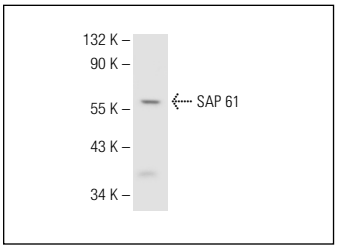
Suitable for use as control antibody for SAP 61 siRNA (h): sc-76443, SAP 61 siRNA (m): sc-76444, SAP 61 shRNA Plasmid (h): sc-76443-SH, SAP 61 shRNA Plasmid (m): sc-76444-SH, SAP 61 shRNA (h) Lentiviral Particles: sc-76443-V and SAP 61 shRNA (m) Lentiviral Particles: sc-76444-V.

SAP 61 (P-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of SAP 61: 60 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or HeLa whole cell lysate: sc-2200.

DATA



SAP 61 (P-17): sc-68789. Western blot analysis of SAP 61 expression in 293T whole cell lysate.

STORAGE

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

PROTOCOLS

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