SANTA CRUZ BIOTECHNOLOGY, INC.

PRP19 (C-18): sc-47923

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The spliceosome, the gigantic molecular machine that performs pre-mRNA splicing in eukaryotes, contains over 200 different proteins and 5 RNA molecules (U1, U2, U4, U5 and U6). Pre-mRNA splicing is essential to remove internal non-coding regions of pre-mRNA (introns) and to join the remaining segments (exons) into mRNA before translation. The PRP19-associated complex is required for stable association of U5 and U6 with the spliceosome after U4 is released. Changes within the spliceosome upon binding of the PRP19-associated complex include remodeling of the U6/5' splice site interaction and destabilization of Lsm proteins to allow further interaction of U6 with the intron sequence.

REFERENCES

1. Cheng, S.C., et al. 1993. PRP19: a novel spliceosomal component. Mol. Cell. Biol. 13: 1876-1882.
2. Tarn, W.Y., et al. 1993. Yeast precursor mRNA processing protein PRP19 associates with the spliceosome concomitant with or just after dissociation of U4 small nuclear RNA. Proc. Natl. Acad. Sci. USA 90: 10821-10825.

CHROMOSOMAL LOCATION

Genetic locus: PRPF19 (human) mapping to 11q12.2; Prpf19 (mouse) mapping to 19 A.

SOURCE

PRP19 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PRP19 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, Ready P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PRP19 (C-18) is recommended for detection of PRP19 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).

PRP19 (C-18) is also recommended for detection of PRP19 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PRP19 siRNA (h): sc-61415, PRP19 siRNA (m): sc-61416, PRP19 shRNA Plasmid (h): sc-61415-SH, PRP19 shRNA Plasmid (m): sc-61416-SH, PRP19 shRNA (h) Lentiviral Particles: sc-61415-V and PRP19 shRNA (m) Lentiviral Particles: sc-61416-V.

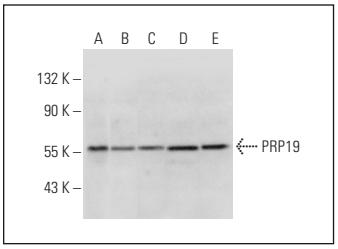
Molecular Weight of PRP19: 54 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, HEK293 whole cell lysate: sc-45136 or HeLa whole cell lysate: sc-2200.

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



PRP19 (C-18): sc-47923. Western blot analysis of PRP19 expression in HeLa nuclear extract (**A**) and HEK293 (**B**), HeLa (**C**), Jurkat (**D**) and MCF7 (**E**) whole cell lysates.

STORAGE

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

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.