SANTA CRUZ BIOTECHNOLOGY, INC.

PRP8 (C-18): sc-23647

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

PRP8, also designated pre-mRNA-processing-splicing factor 8, is a highly conserved nuclear protein and a central component of the catalytic core of the spliceosome, where it may be involved in various molecular rearrangements. PRP8, which is widely expressed, plays a role in transesterification reactions that regulate splicesome-induced pre-mRNA splicing. Specifically, PRP8 interacts with the GU dinucleotide at the 5' splice site (5'SS) and forms a specific UV-inducible cross-link. It also interacts functionally with the 3'SS, affecting the efficiency of the second catalytic step. PRP8 may play a role in the first transesterification step, as PRP8 mutations that prohibit negative regulation of PRP28 or PRP44/Brr2 subsequently block U4 activation. In addition, PRP8 interacts with a conserved region of U6 that is instrumental in the formation of the catalytic core of the spliceosome.

CHROMOSOMAL LOCATION

Genetic locus: PRPF8 (human) mapping to 17p13.3; Prpf8 (mouse) mapping to 11 B5.

SOURCE

PRP8 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of PRP8 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-23647 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

PRP8 (C-18) is recommended for detection of PRP8 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).

PRP8 (C-18) is also recommended for detection of PRP8 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for PRP8 siRNA (h): sc-38209, PRP8 siRNA (m): sc-38210, PRP8 shRNA Plasmid (h): sc-38209-SH, PRP8 shRNA Plasmid (m): sc-38210-SH, PRP8 shRNA (h) Lentiviral Particles: sc-38209-V and PRP8 shRNA (m) Lentiviral Particles: sc-38210-V.

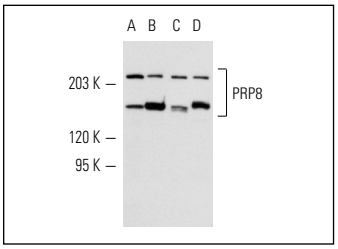
Molecular Weight of PRP8: 220 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, Jurkat nuclear extract: sc-2132 or HL-60 nuclear extract: sc-2147.

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



PRP8 (C-18): sc-23647. Western blot analysis of PRP8 expression in K-562 (**A**), Jurkat (**B**), HeLa (**C**) and HL-60 (**D**) nuclear extracts.

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.