SANTA CRUZ BIOTECHNOLOGY, INC.

PRP8 (H-300): sc-30207

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 (H-300) is a rabbit polyclonal antibody raised against amino acids 2036-2335 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.

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.

APPLICATIONS

PRP8 (H-300) 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), immunohistochemistry (including paraffin-embedded sections) (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 (H-300) 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.

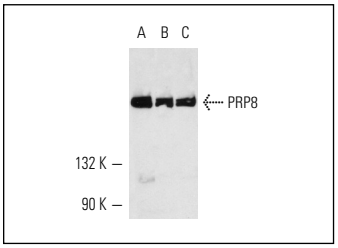
Molecular Weight of PRP8: 220 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Jurkat whole cell lysate: sc-2204 or Y79 cell lysate: sc-2240.

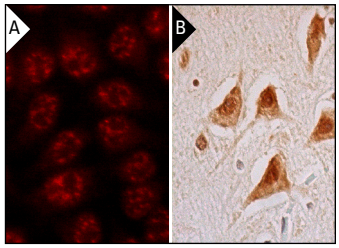
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



PRP8 (H-300): sc-30207. Western blot analysis of PRP8 expression in Y79 (**A**), K-562 (**B**) and Jurkat (**C**) whole cell lysates.



PRP8 (H-300): sc-30207. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebral cortex tissue showing nuclear and cytoplasmic staining of neuronal cells (**B**).

SELECT PRODUCT CITATIONS

1. Tanackovic, G., et al. 2011. PRPF mutations are associated with generalized defects in spliceosome formation and pre-mRNA splicing in patients with retinitis pigmentosa. Hum. Mol. Genet. 20: 2116-2130.

PROTOCOLS

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