

# PRP6 (H-300): sc-48786

## BACKGROUND

Assembly of pre-mRNA spliceosomes requires the interaction between snRNPs U4/U6 and U5 to form the [U4/U6.U5] tri-snRNP. In yeast, the small nuclear ribonucleoprotein-associating protein, Prp6p is necessary for the accumulation of the [U4/U6.U5] tri-snRNP. Yeast Prp6p is uniquely located in discrete sub-nuclear regions, similar to the subnuclear localization of mammalian splicing components. Isolated from HeLa nuclear extract, mammalian PRP6 shares conserved tetraco peptide repeats with yeast Prp6p, making PRP6 the mammalian homolog of yeast Prp6p. In contrast to yeast Prp6p, which is specific for U4/U6, the human PRP6 interacts within the tri-snRNP with both the U5 and the U4/U6 snRNPs via protein-protein interactions, thus providing a bridge that connects the two snRNP particles.

## CHROMOSOMAL LOCATION

Genetic locus: PRPF6 (human) mapping to 20q13.33; Prpf6 (mouse) mapping to 2 H4.

## SOURCE

PRP6 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of PRP6 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.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-48786 X, 200 µg/0.1 ml.

## STORAGE

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

## APPLICATIONS

PRP6 (H-300) is recommended for detection of PRP6 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).

PRP6 (H-300) is also recommended for detection of PRP6 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for PRP6 siRNA (h): sc-38207, PRP6 siRNA (m): sc-38208, PRP6 shRNA Plasmid (h): sc-38207-SH, PRP6 shRNA Plasmid (m): sc-38208-SH, PRP6 shRNA (h) Lentiviral Particles: sc-38207-V and PRP6 shRNA (m) Lentiviral Particles: sc-38208-V.

PRP6 (H-300) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

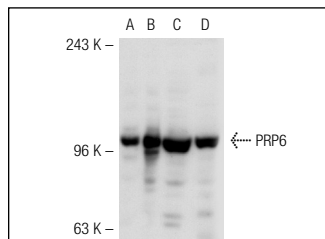
Molecular Weight of PRP6: 102 kDa.

Positive Controls: PRP6 (m): 293T Lysate: sc-127391, HL-60 nuclear extract: sc-2147 or K-562 whole cell lysate: sc-2203.

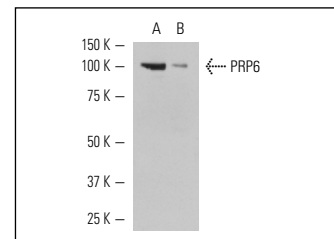
## RECOMMENDED SECONDARY REAGENTS

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.

## DATA



PRP6 (H-300): sc-48786. Western blot analysis of PRP6 expression in non-transfected: sc-117752 (A) and mouse PRP6 transfected: sc-127391 (B) 293T whole cell lysates and K-562 (C) and HL-60 (D) nuclear extracts.



PRP6 (H-300): sc-48786. Western blot analysis of PRP6 expression in K-562 (A) and HL-60 (B) nuclear extracts.

## SELECT PRODUCT CITATIONS

- Huranová, M., et al. 2009. A mutation linked to retinitis pigmentosa in HPRP31 causes protein instability and impairs its interactions with spliceosomal snRNPs. *Hum. Mol. Genet.* 18: 2014-2023.
- Tanackovic, G., et al. 2011. A missense mutation in PRPF6 causes impairment of pre-mRNA splicing and autosomal-dominant retinitis pigmentosa. *Am. J. Hum. Genet.* 88: 643-649.
- 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **PRP6 (B-1): sc-166889** or **PRP6 (D-3): sc-271866**, our highly recommended monoclonal alternatives to PRP6 (H-300).