

# PRNPIP (C-15): sc-162040

## BACKGROUND

Prion diseases, or transmissible spongiform encephalopathies (TSEs), are manifested as genetic, infectious or sporadic, lethal neurodegenerative disorders involving alterations of the prion protein (PrP). Characteristic of prion diseases, cellular PrP (PrP<sup>c</sup>) is converted to the disease form, PrP<sup>Sc</sup>, through alterations in the protein folding conformations. PrP<sup>c</sup> is constitutively expressed in normal adult brain and is sensitive to proteinase K (PK) digestion, while the altered PrP<sup>Sc</sup> conformation is resistant to proteases, resulting in a distinct molecular mass after PK treatment. PRNPIP (prion protein-interacting protein), also known as ERI1 exoribonuclease 3 and PINT (prion interactor 1), is a 337 amino acid protein that interacts with PrP. PRNPIP is strongly expressed in brain, thyroid, testis and heart. There are three isoforms of PRNPIP that are produced as a result of alternative splicing events.

## CHROMOSOMAL LOCATION

Genetic locus: ERI3 (human) mapping to 1p34.1; Eri3 (mouse) mapping to 4 D2.1.

## SOURCE

PRNPIP (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PRNPIP 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-162040 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

PRNPIP (C-15) is recommended for detection of PRNPIP 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).

PRNPIP (C-15) is also recommended for detection of PRNPIP in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for PRNPIP siRNA (h): sc-88263, PRNPIP siRNA (m): sc-152474, PRNPIP shRNA Plasmid (h): sc-88263-SH, PRNPIP shRNA Plasmid (m): sc-152474-SH, PRNPIP shRNA (h) Lentiviral Particles: sc-88263-V and PRNPIP shRNA (m) Lentiviral Particles: sc-152474-V.

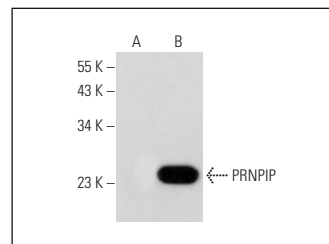
Molecular Weight of PRNPIP isoforms 1/2/3: 37/25/15 kDa.

Positive Controls: PRNPIP (m): 293T Lysate: sc-125856.

## 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



PRNPIP (C-15): sc-162040. Western blot analysis of PRNPIP expression in non-transfected: sc-117752 (A) and mouse PRNPIP transfected: sc-125856 (B) 293T whole cell lysates.

## 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 **PRNPIP (F-10): sc-514310** or **PRNPIP (F-3): sc-515164**, our highly recommended monoclonal alternatives to PRNPIP (C-15).