

# SPRN (R-12): sc-136909

## 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). Constitutively expressed in normal adult brain, cellular PrP (PrP<sup>C</sup>) is sensitive to proteinase K digestion and is converted to the disease form, PrP<sup>Sc</sup>, through alterations in protein folding conformation, which make it resistant to proteases. SPRN (shadow of prion protein), also known as SHO or SHADDO, is a 151 amino acid cytoplasmic protein that is mainly expressed in brain. SPRN is considered a prion-like protein that has PrP<sup>C</sup>-like neuroprotective activity and may act as a modulator for the biological actions of normal and abnormal PrP. In humans, mutations in the gene encoding SPRN may be associated with variant and sporadic Creutzfeldt-Jakob disease, a degenerative neurological disorder that is incurable and invariably fatal.

## REFERENCES

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## STORAGE

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

## CHROMOSOMAL LOCATION

Genetic locus: Sprn (mouse) mapping to 7 F4.

## SOURCE

SPRN (R-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of SPRN of mouse origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-136909 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

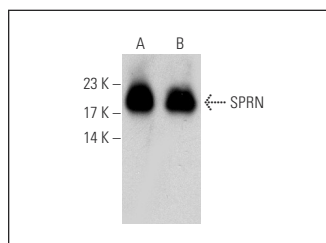
SPRN (R-12) is recommended for detection of SPRN of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SPRN siRNA (m): sc-153787, SPRN shRNA Plasmid (m): sc-153787-SH and SPRN shRNA (m) Lentiviral Particles: sc-153787-V.

Molecular Weight of SPRN: 15 kDa.

Positive Controls: rat brain extract: sc-2392 or rat hippocampus tissue extract.

## DATA



SPRN (R-12): sc-136909. Western blot analysis of SPRN expression in rat hippocampus (A) and rat brain (B) tissue extracts.

## 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.