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 (PrPc) is converted to the disease form, PrPSc, through alterations in the protein folding conformations. PrPc is constitutively expressed in normal adult brain and is sensitive to proteinase K digestion, while the altered PrPSc conformation is resistant to proteases, resulting in a distinct molecular mass after PK treatment. Consistent with the transient infection process of prion diseases, incubation of PrPc with PrPSc both in vitro and in vivo produces PrPc that is resistant to protease degradation. Infectious PrPSc is found at high levels in the brains of animals affected by TSEs, including scrapie in sheep, BSE in cattle and CJD in humans.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: PRNP (human) mapping to 20p13; Prnp (mouse) mapping to 2 F2.

SOURCE

PrP (6D11) is a mouse monoclonal antibody raised against non-denatured prion protein (PrP) of mouse origin.

PRODUCT

Each vial contains 50 µg IgG2a in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

PrP (6D11) is recommended for detection of PrPc and PrPsc of mouse, rat, human and bovine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for PrP siRNA (h): sc-36318, PrP siRNA (m): sc-36319, PrP shRNA Plasmid (h): sc-36319-SH, PrP shRNA Plasmid (m): sc-36319-SH, PrP shRNA (h) Lentiviral Particles: sc-36318-V and PrP shRNA (m) Lentiviral Particles: sc-36319-V.

Molecular Weight of PrP: 30 kDa.

Positive Controls: mouse brain extract: sc-2253.

STORAGE

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

DATA

![Western Blot Analysis](image)

SELECT PRODUCT CITATIONS


RESEARCH USE

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

CONJUGATES

See PrP (5B2): sc-47730 for PrP antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.