

Rtn-3 (H-90): sc-33599

BACKGROUND

The Reticulon (Rtn) family consists of four members: Rtn-1 (also designated neuroendocrine-specific protein or NSP), Rtn-2 (also designated NSP-like-1), Rtn-3 (also designated NSP-like-2) and Nogo (also designated Rtn-4A). Reticulon proteins are anchored to the membranes of the endoplasmic reticulum through their common C-terminal regions. Localized on human chromosome 14q23.1, the gene encoding Rtn-1 is expressed as three isoforms: Rtn-1A (NSP-A), Rtn-1B (NSP-B) and Rtn-1C (NSP-C). The gene encoding human Rtn-2 is located on chromosome 19q13 and also encodes three isoforms. Rtn-2-A and Rtn-2-C are produced by the use of alternative initiation sites, whereas Rtn-2-B is an alternative splice variant of the Rtn-2-A isoform. Rtn-2-A and Rtn-2-B are highly expressed in brain, while Rtn-2-C is primarily expressed in skeletal muscle. The human Rtn-3 gene is located on chromosome 11q13.1 and is widely expressed, with the highest expression being in brain.

CHROMOSOMAL LOCATION

Genetic locus: RTN3 (human) mapping to 11q13.1; Rtn3 (mouse) mapping to 19 A.

SOURCE

Rtn-3 (H-90) is a rabbit polyclonal antibody raised against amino acids 1-90 mapping at the N-terminus of Rtn-3 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.

APPLICATIONS

Rtn-3 (H-90) is recommended for detection of Rtn-3 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).

Rtn-3 (H-90) is also recommended for detection of Rtn-3 in additional species, including canine and porcine.

Suitable for use as control antibody for Rtn-3 siRNA (h): sc-42219, Rtn-3 siRNA (m): sc-42220, Rtn-3 shRNA Plasmid (h): sc-42219-SH, Rtn-3 shRNA Plasmid (m): sc-42220-SH, Rtn-3 shRNA (h) Lentiviral Particles: sc-42219-V and Rtn-3 shRNA (m) Lentiviral Particles: sc-42220-V.

Molecular Weight (predicted) of Rtn-3 isoform A1 (A4b): 113 kDa.

Molecular Weight (predicted) of Rtn-3 isoform A2 (A3b): 111 kDa.

Molecular Weight (predicted) of Rtn-3 isoform B1 (A1): 26 kDa.

Molecular Weight (predicted) of Rtn-3 isoforms B2 (A2)/5: 28/26 kDa.

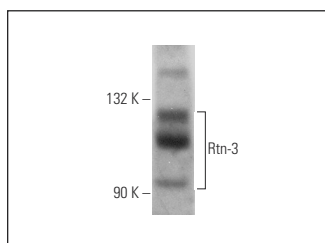
Molecular Weight (observed) of Rtn-3: 115 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409.

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



Rtn-3 (H-90): sc-33599. Western blot analysis of Rtn-3 expression in IMR-32 whole cell lysate.

SELECT PRODUCT CITATIONS

- Chen, R., et al. 2011. Reticulon 3 attenuates the clearance of cytosolic prion aggregates via inhibiting autophagy. *Autophagy* 7: 205-216.
- Goodwin, E.C., et al. 2014. Expression of DNAJB12 or DNAJB14 causes coordinate invasion of the nucleus by membranes associated with a novel nuclear pore structure. *PLoS ONE* 9: e94322.

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.

PROTOCOLS

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



Try **Rtn-3 (F-6): sc-374599**, our highly recommended monoclonal alternative to Rtn-3 (H-90).