SANTA CRUZ BIOTECHNOLOGY, INC.

NgR2 (S-14): sc-168752

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The nogo receptor is a brain-specific protein that is most highly expressed in the gray matter of the CNS. NgR2 (nogo-66 receptor-related protein 2), also known as RTN4RL2 (reticulon 4 receptor-like 2), NGRL3 (nogo receptor-like 3) or NGRH1 (nogo-66 receptor homolog 1), is a 420 amino acid cell membrane protein that localizes to the surface of neurons. Involved in the regulation of axonal regulation in the central nervous system, NgR2 is highly expressed in liver and brain, with lower levels found in mammary gland, kidney, skeletal muscle, thyroid, placenta and spleen. NgR2 belongs to the Nogo receptor family and contains eight LRR (leucine-rich) repeats, one LRRNT domain and a single LRRCT domain. The gene encoding NgR2 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RTN4RL2 (human) mapping to 11q12.1; Rtn4rl2 (mouse) mapping to 2 D.

SOURCE

NgR2 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NgR2 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-168752 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NgR2 (S-14) is recommended for detection of NgR2 of mouse, rat and human 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with NgR3.

NgR2 (S-14) is also recommended for detection of NgR2 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for NgR2 siRNA (h): sc-96573, NgR2 siRNA (m): sc-149954, NgR2 shRNA Plasmid (h): sc-96573-SH, NgR2 shRNA Plasmid (m): sc-149954-SH, NgR2 shRNA (h) Lentiviral Particles: sc-96573-V and NgR2 shRNA (m) Lentiviral Particles: sc-149954-V.

Molecular Weight of NgR2: 46 kDa.

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) 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.

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.