SANTA CRUZ BIOTECHNOLOGY, INC.

NRAGE (H-300): sc-28243



BACKGROUND

The neurotrophin family of growth factors (NGF) function to regulate neuronal differentiation, synaptic activity and neuronal survival, as well as axonal and dendritic growth. The melanoma-associated antigen (MAGE) family consists of a number of antigens recognized by cytotoxic T lymphocytes. Neurotrophin receptor-interacting MAGE homolog (NRAGE) binds the p75 neurotrophin receptor and associates with the plasma membrane when NGF binds p75NTR. The critical factors for NRAGE association lie within the juxtamembrane domain of p75NTR. Overexpression of NRAGE stimulates cell cycle arrest and allows NGF-dependent apoptosis within sympathetic neuron precursors cells. NRAGE is expressed in the medulla oblongata during development and motorneurons. Structural similarities suggest NRAGE and the MAGE protein Necdin (Ndn) mediate cell cycle effects through a shared mechanism.

REFERENCES

- 1. Farinas, I. 1999. Nerotrophin actions during the development of the peri-pheral nervous system. Microsc. Res. Tech. 45: 233-242.
- McAllister, K., et al. 1999. Nerotrophins and synaptic plasticity. Annu. Rev. Neurosci. 22: 295-318.

CHROMOSOMAL LOCATION

Genetic locus: MAGED1 (human) mapping to Xp11.22; Maged1 (mouse) mapping to X C3.

SOURCE

NRAGE (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of NRAGE of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

NRAGE (H-300) is recommended for detection of NRAGE of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NRAGE siRNA (h): sc-37320, NRAGE siRNA (m): sc-45975, NRAGE shRNA Plasmid (h): sc-37320-SH, NRAGE shRNA Plasmid (m): sc-45975-SH, NRAGE shRNA (h) Lentiviral Particles: sc-37320-V and NRAGE shRNA (m) Lentiviral Particles: sc-45975-V.

Molecular Weight of NRAGE: 97 kDa.

Positive Controls: ALL-SIL whole cell lysate: sc-364356, NRAGE (m): 293T Lysate: sc-122121 or Jurkat whole cell lysate: sc-2204.

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. 4) Immuno-histochemistry: use ImmunoCruz[™]: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA





NRAGE (H-300): sc-28243. Western blot analysis of NRAGE expression in non-transfected 293T: sc-117752 (Å), mouse NRAGE transfected 293T: sc-122121 (B), Jurkat (C) and ALL-SIL (D) whole cell lysates. NRAGE (H-300): sc-28243. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic staining of adnexal and epidermal cells. Kindly provided by The Swedish Human Protein Atlas (HPA) program (B).

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.

MONOS Satisfation Guaranteed

Try NRAGE (31): sc-136552 or NRAGE (F-9): sc-393291, our highly recommended monoclonal alternatives to NRAGE (H-300).