

NRAGE (T-20): sc-14398



The Power to Question

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 motoneurons. Structural similarities suggest NRAGE and the MAGE protein Necdin (Ndn) mediate cell cycle effects through a shared mechanism.

REFERENCES

1. Farinas, I. 1999. Neurotrophin actions during the development of the peripheral nervous system. *Microsc. Res. Tech.* 45: 233-242.
2. McAllister, K., et al. 1999. Neurotrophins and synaptic plasticity. *Annu. Rev. Neurosci.* 22: 295-318.
3. Okami, J., et al. 2000. Genetic detection for micrometastasis in lymph node of biliary tract carcinoma. *Clin. Cancer Res.* 6: 2326-2332.
4. Granelli, P., et al. 2000. Melanoma antigen genes 1 and 2 are differentially expressed in human gastric and cardiac carcinomas. *Scand. J. Gastroenterol.* 35: 528-533.
5. Klein, C., et al. 2000. Comparative analysis of genetically modified dendritic cells and tumor cells as therapeutic cancer vaccines. *J. Exp. Med.* 191: 1699-1708.
6. Busam, K.J., et al. 2000. Immunoreactivity with the anti-MAGE antibody 57B in malignant melanoma: frequency of expression and correlation with prognostic parameters. *Mod. Pathol.* 13: 459-465.

CHROMOSOMAL LOCATION

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

SOURCE

NRAGE (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of NRAGE 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-14398 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

NRAGE (T-20) 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 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).

NRAGE (T-20) is also recommended for detection of NRAGE in additional species, including canine and porcine.

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.

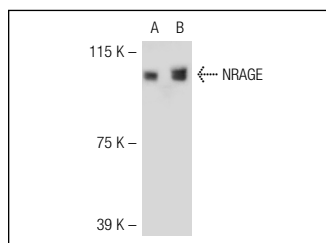
Molecular Weight of NRAGE: 97 kDa.

Positive Controls: NRAGE (h): 293T Lysate: sc-114826, NRAGE (m): 293T Lysate: sc-122121 or Jurkat whole cell lysate: sc-2204.

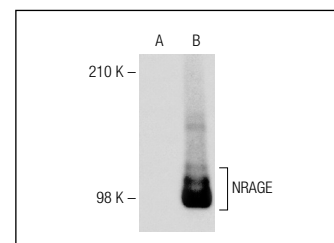
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



NRAGE (T-20): sc-14398. Western blot analysis of NRAGE expression in non-transfected: sc-117752 (A) and human NRAGE transfected: sc-114826 (B) 293T whole cell lysates.



NRAGE (T-20): sc-14398. Western blot analysis of NRAGE expression in non-transfected: sc-117752 (A) and mouse NRAGE transfected: sc-122121 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Cronwright, G., et al. 2005. Cancer/testis antigen expression in human mesenchymal stem cells: down-regulation of SSX impairs cell migration and matrix metalloproteinase 2 expression. *Cancer Res.* 65: 2207-2215.

RESEARCH USE

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