

# NTR1 (H-130): sc-15311

## BACKGROUND

Neurotensin (NT) initiates an intracellular response by interacting with the G protein-coupled receptors NTR1 (NTS1 receptor, high affinity NTR) and NTR2 (NTS2 receptor, levocabastine-sensitive neurotensin receptor), and the type I receptor NTR3 (NTS3 receptor, sortilin-1, Gp95). NT has a wide distribution in regions of the brain and in peripheral tissues where NT receptors can contribute to hypotension, hyperglycemia, hypothermia, antinociception and regulation of intestinal motility and secretion. HL-60 cells express NTR1, which can couple to  $G_q$ ,  $G_{i/o}$  or  $G_s$ . Alternative splicing of rat NTR2 can generate a 5-transmembrane domain variant isoform that is co-expressed with the full-length NTR2 throughout the brain and spinal cord. NTR3 activation in the murine microglial cell line N11 induces MIP-2, MCP-1, IL-1 $\beta$  and TNF $\alpha$  in an ERK1/2 and Akt kinase-dependent manner.

## REFERENCES

- Nielsen, M.S., et al. 1999. Sortilin/neurotensin receptor-3 binds and mediates degradation of lipoprotein lipase. *J. Biol. Chem.* 274: 8832-8836.
- Choi, S.Y., et al. 1999. Characterization of high affinity neurotensin receptor NTR1 in HL-60 cells and its down regulation during granulocytic differentiation. *Br. J. Pharmacol.* 126: 1050-1056.

## CHROMOSOMAL LOCATION

Genetic locus: NTSR1 (human) mapping to 20q13.33; Ntsr1 (mouse) mapping to 2 H4.

## SOURCE

NTR1 (H-130) is a rabbit polyclonal antibody raised against amino acids 181-310 of NTR1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

NTR1 (H-130) is recommended for detection of NTR1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

NTR1 (H-130) is also recommended for detection of NTR1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for NTR1 siRNA (h): sc-36103, NTR1 siRNA (m): sc-36104, NTR1 shRNA Plasmid (h): sc-36103-SH, NTR1 shRNA Plasmid (m): sc-36104-SH, NTR1 shRNA (h) Lentiviral Particles: sc-36103-V and NTR1 shRNA (m) Lentiviral Particles: sc-36104-V.

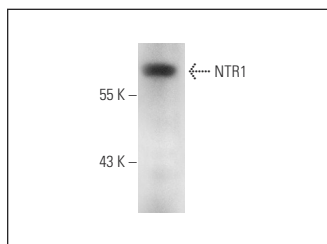
Molecular Weight of NTR1: 52/54 kDa.

Positive Controls: mouse cerebellum extract: sc-2403.

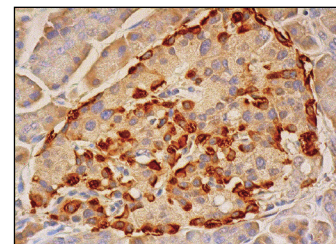
## RECOMMENDED SECONDARY REAGENTS

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) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



NTR1 (H-130): sc-15311. Western blot analysis of NTR1 expression in mouse cerebellum tissue extract.



NTR1 (H-130): sc-15311. Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing cytoplasmic staining of exocrine glandular cells and Islets of Langerhans.

## SELECT PRODUCT CITATIONS

- Koon, H.W., et al. 2009. Neurotensin induces IL-6 secretion in mouse preadipocytes and adipose tissues during 2,4,6-trinitrobenzenesulphonic acid-induced colitis. *Proc. Natl. Acad. Sci. USA* 106: 8766-8771.
- Gromova, P., et al. 2011. Neurotensin receptor 1 is expressed in gastrointestinal stromal tumors but not in interstitial cells of Cajal. *PLoS ONE* 6: e14710.

## 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.


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Satisfaction  
Guaranteed

Try **NTR1 (B-12): sc-376958** or **NTR1 (B-9): sc-374492**, our highly recommended monoclonal alternatives to NTR1 (H-130).