

NTR1 (C-20): sc-7596

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 β and TNF α in an ERK 1/2 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.
- Navarro, V., et al. 2002. Shedding of the luminal domain of the neurotensin receptor-3/sortilin in the HT29 cell line. *Biochem. Biophys. Res. Commun.* 298: 760-764.
- Martin, S., et al. 2003. Involvement of the neurotensin receptor-3 in the neurotensin-induced migration of human microglia. *J. Neurosci.* 23: 1198-1205.

CHROMOSOMAL LOCATION

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

SOURCE

NTR1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of NTR1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-7596 P, (100 μ g 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.

RESEARCH USE

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

APPLICATIONS

NTR1 (C-20) is recommended for detection of NTR1 of human and, to a lesser extent, mouse and rat 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

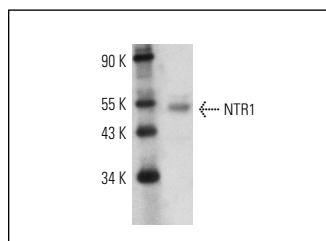
NTR1 (C-20) is also recommended for detection of NTR1 in additional species, including bovine.

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: IMR-32 cell lysate: sc-2409 or T98G cell lysate: sc-2294.

DATA



NTR1 (C-20): sc-7596. Western blot analysis of NTR1 expression in mouse cerebellum extract.

SELECT PRODUCT CITATIONS

- Souazé, F., et al. 2006. Expression of neurotensin and NT1 receptor in human breast cancer: a potential role in tumor progression. *Cancer Res.* 66: 6243-6249.
- Bossard, C., et al. 2007. Over-expression of neurotensin high-affinity receptor 1 (NTS1) in relation with its ligand neurotensin (NT) and nuclear β -catenin in inflammatory bowel disease-related oncogenesis. *Peptides* 28: 2030-2035.
- Dupouy, S., et al. 2009. The neurotensin receptor-1 pathway contributes to human ductal breast cancer progression. *PLoS ONE* 4: e4223.
- 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.

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Try **NTR1 (B-12): sc-376958** or **NTR1 (B-9): sc-374492**, our highly recommended monoclonal alternatives to NTR1 (C-20).