

# NTR3 (E-9): sc-376576

## 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<sub>q</sub>, G<sub>i/o</sub>, or G<sub>s</sub>. 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.

## CHROMOSOMAL LOCATION

Genetic locus: SORT1 (human) mapping to 1p13.3; Sort1 (mouse) mapping to 3 F3.

## SOURCE

NTR3 (E-9) is a mouse monoclonal antibody raised against amino acids 78-377 mapping within an extracellular domain of NTR3 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

NTR3 (E-9) is recommended for detection of NTR3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for NTR3 siRNA (h): sc-42119, NTR3 siRNA (m): sc-42120, NTR3 siRNA (r): sc-156020, NTR3 shRNA Plasmid (h): sc-42119-SH, NTR3 shRNA Plasmid (m): sc-42120-SH, NTR3 shRNA Plasmid (r): sc-156020-SH, NTR3 shRNA (h) Lentiviral Particles: sc-42119-V, NTR3 shRNA (m) Lentiviral Particles: sc-42120-V and NTR3 shRNA (r) Lentiviral Particles: sc-156020-V.

Molecular Weight (predicted) of NTR3: 92 kDa.

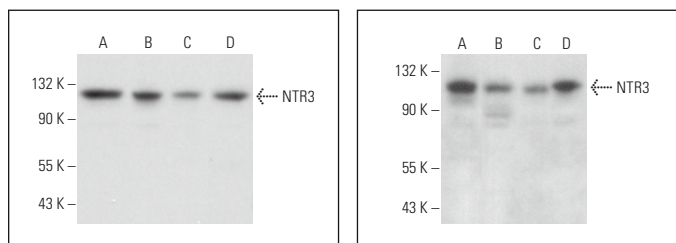
Molecular Weight (observed) of NTR3: 90-114 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285, SW480 cell lysate: sc-2219 or SK-N-SH cell lysate: sc-2410.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



NTR3 (E-9): sc-376576. Western blot analysis of NTR3 expression in MIA PaCa-2 (A), IMR-32 (B), Neuro-2A (C) and C6 (D) whole cell lysates.

NTR3 (E-9): sc-376576. Western blot analysis of NTR3 expression in NTERA-2 cl.D1 (A), SK-N-SH (B), 3T3-L1 (C) and SW480 (D) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Jian, J., et al. 2016. Progranulin recruits HSP70 to  $\beta$ -glucocerebrosidase and is therapeutic against Gaucher disease. *EBioMedicine* 13: 212-224.
- Wang, S., et al. 2019. Inducible Exoc7/Exo70 knockout reveals a critical role of the exocyst in Insulin-regulated Glut4 exocytosis. *J. Biol. Chem.* 294: 19988-19996.
- Sbai, O., et al. 2021. The Actin binding protein  $\alpha$ -actinin-2 expression is associated with dendritic spine plasticity and migrating granule cells in the rat dentate gyrus following pilocarpine-induced seizures. *Exp. Neurol.* 335: 113512.
- Kyriatzis, G., et al. 2021. Neurotensin receptor 2 is induced in astrocytes and brain endothelial cells in relation to neuroinflammation following pilocarpine-induced seizures in rats. *Glia* 69: 2618-2643.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.