NTR1 (B-12): sc-376958

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, levocobastine-sensitive Neurotensin receptor), and the type I receptor NTR3 (NTS3 receptor, sortilin-1, Gp95). Neurotensin has a wide distribution in regions of the brain and in peripheral tissues where Neurotensin receptors can contribute to hypotension, hyperglycemia, hypothermia, antinociception and regulation of intestinal motility and secretion. HL-60 cells express NTR1, which can couple to $G_q$, $G_{ip}$, or $G_s$. Alternative splicing of rat NTR2 can generate a five-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-1β and TNFα in an ERK1/2- and Akt kinase-dependent manner.

REFERENCES

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

SOURCE
NTR1 (B-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 389-417 at the C-terminus of NTR1 of human origin.

PRODUCT
Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Blocking peptide available for competition studies, sc-376958 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS
NTR1 (B-12) is recommended for detection of NTR1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), 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 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 glycosylation: 52/54 kDa.

Positive Controls: EOC 20 whole cell lysate: sc-384187, mouse brain extract: sc-2253 or mouse cerebellum extract: sc-2403.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:

DATA

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.

NTR1 (B-12): sc-376958. Western blot analysis of NTR1 expression in EOC 20 whole cell lysate (A) and mouse cerebellum (B), mouse brain (C) and rat brain (D) tissue extracts.

NTR1 (B-12): sc-376958. Immunofluorescence staining of methanol-fixed Hela cells showing cytoplasmic localization (A), Immunoperoxidase staining of formalin fixed, paraffin-embedded human pancreas tissue showing membrane and cytoplasmic staining of exocrine glandular cells (B).