

NTN (C-17): sc-6362

BACKGROUND

Glial cell line-derived neurotrophic factor (GDNF) and the related neurotrophic factor neurturin (NTN) are potent survival factors for central and peripheral neurons. Two receptors for these factors, GDNFR α (also designated RETL1 or TrnR1) and RETL2 (also designated TrnR2), have been identified. The receptors do not contain transmembrane domains and are attached to the cell membrane by glycosyl-phosphoinositol linkage. Binding of GDNF or NTN to either of these receptors leads to the activation of the tyrosine kinase Ret. GDNF and NTN have also been shown to be capable of activating the MAP kinase and PI 3-kinase pathways, indicating a potential role for these proteins in neuronal survival and in the development of many neuronal populations.

REFERENCES

1. Lin, L.F., et al. 1993. GDNF: a glial cell line-derived neurotrophic factor for midbrain dopaminergic neurons. *Science* 260: 1130-1132.
2. Kotzbauer, P.T., et al. 1996. Neurturin, a relative of glial-cell-line derived neurotrophic factor. *Nature* 384: 467-470.
3. Jing, S., et al. 1997. GFR α -2 and GFR α -3 are two new receptors for ligands of the GDNF family. *J. Biol. Chem.* 272: 33111-33117.

CHROMOSOMAL LOCATION

Genetic locus: NRTN (human) mapping to 19p13.3; Nrtn (mouse) mapping to 17 D.

SOURCE

NTN (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of NTN 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-6362 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

NTN (C-17) is recommended for detection of NTN of mouse, rat and human 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NTN (C-17) is also recommended for detection of NTN in additional species, including canine, bovine and porcine.

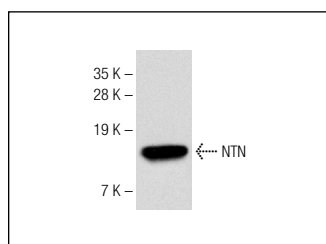
Suitable for use as control antibody for NTN siRNA (h): sc-41968, NTN siRNA (m): sc-41969, NTN shRNA Plasmid (h): sc-41968-SH, NTN shRNA Plasmid (m): sc-41969-SH, NTN shRNA (h) Lentiviral Particles: sc-41968-V and NTN shRNA (m) Lentiviral Particles: sc-41969-V.

Molecular Weight of NTN: 22 kDa.

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).

DATA



NTN (C-17): sc-6362. Western blot analysis of human recombinant neurturin.

SELECT PRODUCT CITATIONS

1. Jomary, C., et al. 2004. Expression of neurturin, glial cell line-derived neurotrophic factor, and their receptor components in light-induced retinal degeneration. *Invest. Ophthalmol. Vis. Sci.* 45: 1240-1246.
2. Lucini, C., et al. 2004. Artemin-like immunoreactivity in the zebrafish, *Danio rerio*. *Anat. Embryol.* 208: 403-410.
3. Lucini, C., et al. 2007. Glial cell line-derived neurotrophic factor expression in the retina of adult zebrafish (*Danio rerio*). *Neurosci. Lett.* 429: 156-160.
4. Maruccio, L., et al. 2008. The development of avian enteric nervous system: distribution of artemin immunoreactivity. *Acta Histochem.* 110: 163-171.
5. Lucini, C., et al. 2008. Cellular localization of GDNF and its GFR α 1/RET receptor complex in the developing pancreas of cat. *J. Anat.* 213: 565-572.

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.

MONOS
Satisfaction
Guaranteed

Try **NTN (D-10): sc-393626**, our highly recommended monoclonal alternative to NTN (C-17).