

# Neurexophilin-3 (V-16) : sc-66483

## BACKGROUND

Neurexophilin-1 (also known as NPH1 or NXPH1), Neurexophilin-2 (also known as NPH2 or NXPH2) and Neurexophilin-3 (also known as NPH3 or NXPH3) are members of the Neurexophilin family (Neurexophilin-1-4) of neuropeptide-like glycoproteins that are proteolytically processed after synthesis. Neurexophilin-1-3 are secreted proteins that are thought to function as signaling molecules which specifically bind to target proteins, such as neurexin  $\alpha$  (a protein that promotes adhesion between dendrites and axons), and are essential for proper neurotransmitter release. While Neurexophilin-1 is located primarily in spleen tissue, Neurexophilin-2 is expressed primarily in kidney and both Neurexophilin-2 and Neurexophilin-3 are highly expressed in brain. Defects in the gene encoding Neurexophilin-1 may be associated with schizophrenia, a mental disorder characterized by an abnormal perception of reality.

## REFERENCES

- Petrenko, A.G., Ullrich, B., Missler, M., Krasnoperov, V., Rosahl, T.W. and Sudhof, T.C. 1996. Structure and evolution of Neurexophilin. *J. Neurosci.* 16: 4360-4369.
- Missler, M., Hammer, R.E. and Sudhof, T.C. 1998. Neurexophilin binding to  $\alpha$ -neurexins. A single LNS domain functions as an independently folding ligand-binding unit. *J. Biol. Chem.* 273: 34716-34723.
- Missler, M. and Sudhof, T.C. 1998. Neurexophilins form a conserved family of neuropeptide-like glycoproteins. *J. Neurosci.* 18: 3630-3638.
- Clarris, H.J., McKeown, S. and Key, B. 2002. Expression of neurexin ligands, the neuroligins and the Neurexophilins, in the developing and adult rodent olfactory bulb. *Int. J. Dev. Biol.* 46: 649-652.
- Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604635. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: NXPH3 (human) mapping to 17q21.33; Nxph3 (mouse) mapping to 11 D.

## SOURCE

Neurexophilin-3 (V-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Neurexophilin-3 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.

Blocking peptide available for competition studies, sc-66483 P, (100  $\mu$ 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.

## APPLICATIONS

Neurexophilin-3 (V-16) is recommended for detection of Neurexophilin-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Neurexophilin-3 (V-16) is also recommended for detection of Neurexophilin-3 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for Neurexophilin-3 siRNA (h): sc-62679, Neurexophilin-3 siRNA (m): sc-62680, Neurexophilin-3 shRNA Plasmid (h): sc-62679-SH, Neurexophilin-3 shRNA Plasmid (m): sc-62680-SH, Neurexophilin-3 shRNA (h) Lentiviral Particles: sc-62679-V and Neurexophilin-3 shRNA (m) Lentiviral Particles: sc-62680-V.

Molecular Weight of Neurexophilin-3: 28 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## 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) or our catalog for detailed protocols and support products.