# SANTA CRUZ BIOTECHNOLOGY, INC.

# Neurexophilin-2 (P-15): sc-66478



# 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 I $\alpha$  (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

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- Missler, M. and Südhof, T.C. 1998. Neurexophilins form a conserved family of neuropeptide-like glycoproteins. J. Neurosci. 18: 3630-3638.
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- Nussbaum, J., Xu, Q., Payne, T.J., Ma, J.Z., Huang, W., Gelernter, J. and Li, M.D. 2008. Significant association of the neurexin-1 gene (NRXN1) with nicotine dependence in European- and African-American smokers. Hum. Mol. Genet. 17: 1569-1577.
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#### CHROMOSOMAL LOCATION

Genetic locus: NXPH2 (human) mapping to 2q22.1.

#### SOURCE

Neurexophilin-2 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Neurexophilin-2 of human origin.

#### **STORAGE**

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

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-66478 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

Neurexophilin-2 (P-15) is recommended for detection of Neurexophilin-2 of 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-2 (P-15) is also recommended for detection of Neurexophilin-2 in additional species, including bovine and porcine.

Suitable for use as control antibody for Neurexophilin-2 siRNA (h): sc-62677, Neurexophilin-2 shRNA Plasmid (h): sc-62677-SH and Neurexophilin-2 shRNA (h) Lentiviral Particles: sc-62677-V.

Molecular Weight of Neurexophilin-2: 30 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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ 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 or our catalog for detailed protocols and support products.