

Neurexophilin-3 (B-11): sc-393156

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 α (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., et al. 1996. Structure and evolution of neurexophilin. *J. Neurosci.* 16: 4360-4369.
- Missler, M., et al. 1998. Neurexophilin binding to α -neurexins. A single LNS domain functions as an independently folding ligand-binding unit. *J. Biol. Chem.* 273: 34716-34723.
- Missler, M. and Südhof, T.C. 1998. Neurexophilins form a conserved family of neuropeptide-like glycoproteins. *J. Neurosci.* 18: 3630-3638.
- Clarris, H.J., et al. 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.

CHROMOSOMAL LOCATION

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

SOURCE

Neurexophilin-3 (B-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 175-202 within an internal region of Neurexophilin-3 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Neurexophilin-3 (B-11) is available conjugated to agarose (sc-393156 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393156 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393156 PE), fluorescein (sc-393156 FITC), Alexa Fluor[®] 488 (sc-393156 AF488), Alexa Fluor[®] 546 (sc-393156 AF546), Alexa Fluor[®] 594 (sc-393156 AF594) or Alexa Fluor[®] 647 (sc-393156 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-393156 AF680) or Alexa Fluor[®] 790 (sc-393156 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393156 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Neurexophilin-3 (B-11) is recommended for detection of Neurexophilin-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ 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).

Neurexophilin-3 (B-11) is also recommended for detection of Neurexophilin-3 in additional species, including equine and canine.

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.

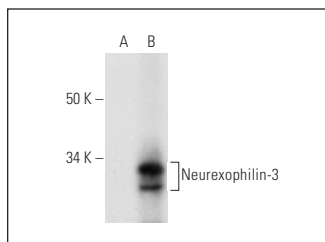
Molecular Weight of Neurexophilin-3: 28 kDa.

Positive Controls: Neurexophilin-3 (m): 293T Lysate: sc-125696.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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 κ BP-FITC: sc-516140 or m-IgG κ 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



Neurexophilin-3 (B-11): sc-393156. Western blot analysis of Neurexophilin-3 expression in non-transfected: sc-117752 (A) and mouse Neurexophilin-3 transfected: sc-125696 (B) 293T whole cell lysates.

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.

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