

### **Neuritin Antibody**

Catalog # ASC10524

## **Specification**

## **Neuritin Antibody - Product Information**

Application WB, IHC, IF Primary Accession Q9NPD7

Other Accession

Reactivity

Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype IgG

Calculated MW Predicted: 16 kDa

Observed: 15 kDa KDa

Application Notes Neuritin antibody can be used for

detection of Neuritin by Western blot at 5 and 10  $\mu$ g/mL. Antibody can also be used for immunohistochemistry starting at 5  $\mu$ g/mL. For immunofluorescence start at 20

μg/mL.

### **Neuritin Antibody - Additional Information**

Gene ID **51299** 

**Other Names** 

Neuritin Antibody: NRN, dJ380B8.2, NRN, Neuritin, neuritin 1

Target/Specificity

NRN1;

## **Reconstitution & Storage**

Neuritin antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

### **Precautions**

Neuritin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Neuritin Antibody - Protein Information**

Name NRN1

**Synonyms NRN** 

#### **Function**

Promotes neurite outgrowth and especially branching of neuritic processes in primary hippocampal and cortical cells.



**Cellular Location** 

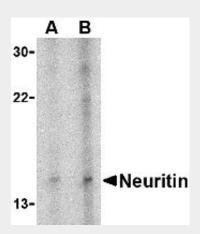
Cell membrane; Lipid-anchor, GPI- anchor. Synapse

# **Neuritin Antibody - Protocols**

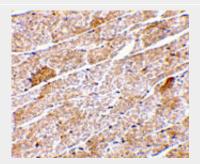
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## **Neuritin Antibody - Images**

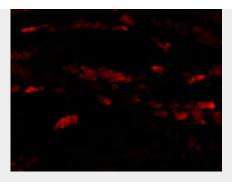


Western blot analysis of neuritin in Daudi cell lysate with neuritin antibody at (A) 5 and (B) 10  $\mu$ g/mL.



Immunohistochemistry of Neuritin in mouse heart tissue with Neuritin antibody at 5  $\mu$ g/mL.





Immunofluorescence of Neuritin in Mouse Heart cells with Neuritin antibody at 20 µg/mL.

#### **Neuritin Antibody - Background**

Neuritin Antibody: As the nervous system of a complex organism develops, it establishes functional networks through the growth and retraction of synaptic connections from growing axons and dendrites. This synaptic remodeling involves neuro-transmitter signaling, activation of neurotrophin receptors and alterations in gene expression. One such gene whose expression is increased by neural activity is neuritin, a GPI-anchored protein that is expressed in postmitotic differentiating neurons of the developing nervous system. Its expression is also induced by the neurotrophins BDNF and NT-3. Purified recombinant neuritin promotes neurite outgrowth and arborization in primary embryonic neuronal cultures, suggesting that neuritin may play a role as a downstream effector of activity-induced neurite outgrowth. More recent experiments have shown that neuritin is required for the androgen-induced axonal elongation in motor neurons and is upregulated following spinal cord injury, suggesting that neuritin may also play a role in survival and axonal regeneration.

#### **Neuritin Antibody - References**

Li Z and Sheng M. Some assembly required: the development of neuronal synapses. Nat. Rev. Mol. Cell Biol. 2003; 4:833-41.

Naeve GS, Ramakrishnan M, Kramer R, et al. Neuritin: A gene induced by neural activity and neurotrophins that promotes neuritogenesis. Proc. Natl. Acad. Sci. USA 1997; 94:2648-53. Marron TU, Guerini V, Rusmini P, et al. Androgen-induced neurite outgrowth is mediated by neuritin in motor neurons. J. Neurochem. 2005; 92:10-20.

Di Giovanni S, De Biase A, Yakovlev A, et al. In vivo and in vitro characterization of novel neuronal plasticity factors identified following spinal cord injury. J. Biol. Chem. 2005; 280:2084-91.