

**Neuritin Antibody**  
**Catalog # ASC10524****Specification**

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**Neuritin Antibody - Product Information**

|                   |   |
|-------------------|---|
| Application       | WB, IHC, IF   |
| Primary Accession | <a href="#">Q9NPD7</a>                              |
| Other Accession   | <a href="#">NP_057672</a> , <a href="#">7706123</a> |
| Reactivity        | Human, Mouse  |
| Host              | Rabbit  |
| Clonality         | Polyclonal  |
| Isotype           | IgG   |
| Calculated MW     | Predicted: 16 kDa                                   |

|                   |   |
|-------------------|---|
| Application Notes | <b>Observed: 15 kDa KDa</b><br>Neuritin antibody can be used for detection of Neuritin by Western blot at 5 and 10 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL. |
|-------------------|---|

**Neuritin Antibody - Additional Information**

|  |       |
|--|-------|
| Gene ID  | 51299 |
| <b>Other Names</b>   |       |
| 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.

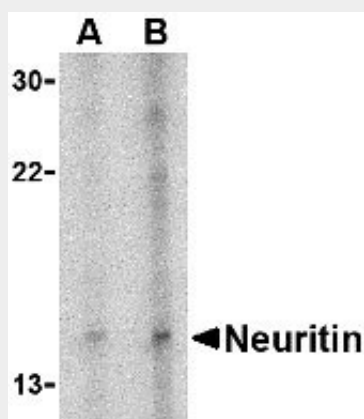
**Cellular Location**

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

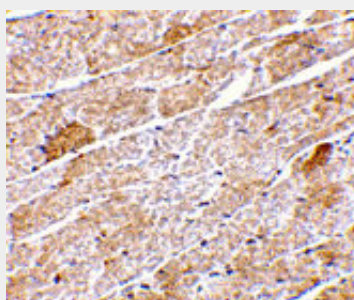
**Neuritin Antibody - Protocols**

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

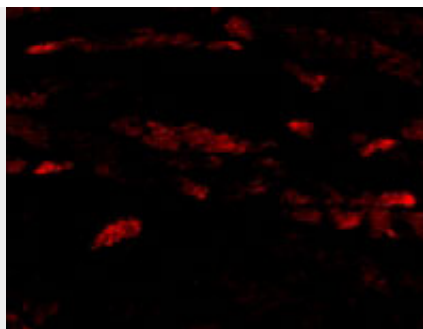
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Neuritin Antibody - Images**

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



Immunohistochemistry of Neuritin in mouse heart tissue with Neuritin antibody at 5 µg/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.