

Neuritin Antibody

Catalog # ASC10524

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9NPD7
Other Accession	NP_057672 , 7706123
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	15333
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Neuritin antibody can be used for detection of Neuritin by Western blot at 5 and 10 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

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.

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

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.

References

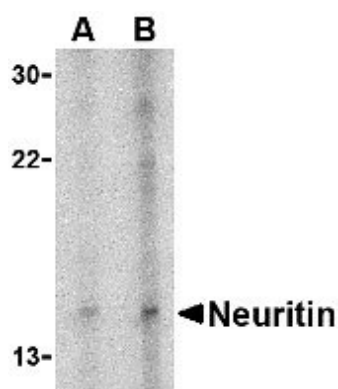
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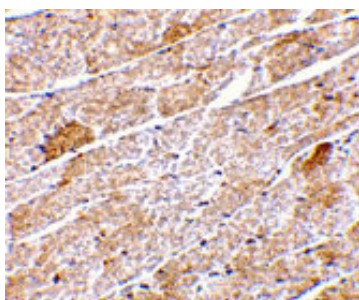
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Di Giovanni S, De Biase A, Yakovlev A, et al. In vivo and in vitro characterization of novel neuronal plasticity factors identified following spinal cord injury. *J. Biol. Chem.* 2005; 280:2084-91.

Images

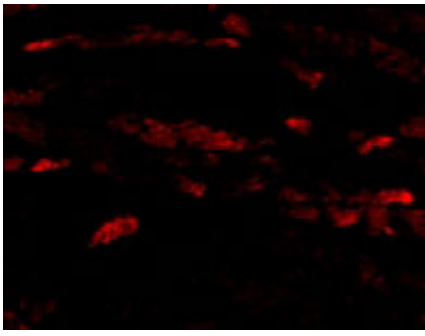


Western blot analysis of neuritin in Daudi cell lysate with neuritin antibody at (A) 5 and (B) 10 $\mu\text{g/mL}$.



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

Immunofluorescence of Neuritin in Mouse Heart cells with Neuritin antibody at 20 $\mu\text{g/mL}$.



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