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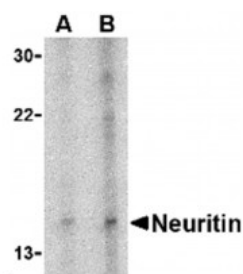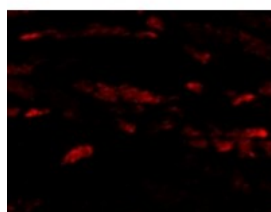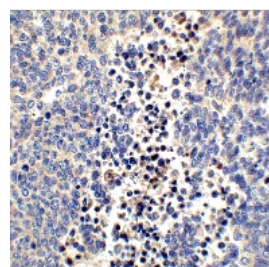techsupport@prosci-inc.com

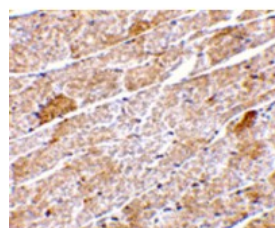# Neuritin Antibody

CATALOG NUMBER: 4101

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

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

Immunohistochemistry of Neuritin in human brain tissue with Neuritin antibody at 2.5 ug/ml.

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

Specifications

SPECIES REACTIVITY:	Human, Mouse
HOMOLOGY:	Predicted species reactivity based on immunogen sequence: Bovine: (100%)
TESTED APPLICATIONS:	ELISA, IF, IHC-P, WB
APPLICATIONS:	Neuritin antibody can be used for detection of Neuritin by Western blot at 5 and 10 ug/mL. Antibody can also be used for immunohistochemistry starting at 2.5 ug/mL. For immunofluorescence start at 20 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1224 - Daudi Cell Lysate
	2) Cat. No. 1401 - Mouse Heart Tissue Lysate
PREDICTED MOLECULAR WEIGHT:	Predicted: 16 kDa
	Observed: 15 kDa
IMMUNOGEN:	Neuritin antibody was raised against a 20 amino acid synthetic peptide from near the center of human neuritin.
	The immunogen is located within amino acids 70 - 120 of Neuritin.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	Neuritin Antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	Neuritin Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	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.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	Neuritin Antibody: NRN, dJ380B8.2, NRN, Neuritin
ACCESSION NO.:	NP_057672
PROTEIN GI NO.:	7706123
OFFICIAL SYMBOL:	NRN1
GENE ID:	51299

Background

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:	1) Li Z and Sheng M. Some assembly required: the development of neuronal synapses. Nat. Rev. Mol. Cell Biol. 2003; 4:833-41.
	2) 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.
	3) 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.
	4) 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.

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