

### Instruction Manual

<b>Catalog Number</b>	PK-AB718-4101
<b>Synonyms</b>	Neuritin Antibody: NRN1, cpg15
<b>Description</b>	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.
<b>Quantity</b>	100 µg
<b>Source / Host</b>	Rabbit
<b>Immunogen</b>	Neuritin antibody was raised in rabbits against a 20 amino acid peptide from near the center of human neuritin.
<b>Purification Method</b>	Affinity chromatography purified via peptide column.
<b>Clone / IgG Subtype</b>	Polyclonal antibody
<b>Species Reactivity</b>	Human, Mouse
<b>Specificity</b>	
<b>Formulation</b>	Antibody is supplied in PBS containing 0.02% sodium azide.
<b>Reconstitution</b>	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
<b>Storage &amp; Stability</b>	Antibody can be stored at 4°C for three months and at -20°C 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.
<b>Applications</b>	E, WB, IHC, IF    INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.  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.
<b>Images</b>	Available upon request.
<b>References</b>	Li Z and Sheng M. Some assembly required: the development of neuronal synapses. <i>Nat. Rev. Mol. Cell Biol.</i> 2003; 4:833-41.  Naeve GS, Ramakrishnan M, Kramer R, et al. Neuritin: A gene induced by neural activity and neurotrophins that promotes neuritogenesis. <i>Proc. Natl. Acad. Sci. USA</i> 1997; 94:2648-53.  Marron TU, Guerini V, Rusmini P, et al. Androgen-induced neurite outgrowth is mediated by neuritin in motor neurons. <i>J. Neurochem.</i> 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. <i>J. Biol. Chem.</i> 2005; 280:2084-91.
<b>Images</b>	Available upon request.
<b>Related Products</b>	Cat.No. PK-AB718-4101P; Neuritin Peptide Cat.No. PK-AB718-1224; Daudi Cell Lysate

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