

## DATASHEET

### Recombinant human Neuritin-1 / NRN1 protein

#### Product overview

<b>Name</b>	Recombinant human Neuritin-1 / NRN1 protein
<b>Cat No</b>	HB7631
<b>Biological description</b>	Neurotrophic factor expressed in response to induction of neuronal activity by NGF, BDNF, NT3 and other neural stimulators.  Functions as a molecular mediator of neurite outgrowth, neuronal survival, and synaptic maturation.
<b>Species of origin</b>	human
<b>Alternative names</b>	Recombinant Human Neuritin-1, Neuritin 1, NRN1, Nrn, dJ380B8.2, Neuritin.
<b>Purity</b>	>95%
<b>Description</b>	Neurotrophic factor

#### Biological Data

<b>Application notes</b>	The ED <sub>50</sub> = <25ng/ml (determined by a cell proliferation assay using rat C6 cells), corresponding to a specific activity of >4.0 x 10 <sup>4</sup> IU/mg.
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#### Solubility & Handling

<b>Solubility overview</b>	To make a stock solution, reconstitute the lyophilized NRN1 in sterile 18MΩcm water at a concentration > 100µg/ml, which can then be diluted to make a working solution
<b>Handling</b>	<ul style="list-style-type: none"><li>Solutions should be made in sterile deionized water (not less than 100 µg/ml). This solution can then be further diluted with other aqueous solutions.</li><li>Following reconstitution, solutions may be stored at 4°C and are useable for around 2-7 days and for future use store at -18°C.</li><li>For long term storage, a carrier protein (0.1% HSA or BSA) should be added to stock solutions. Solutions should be aliquoted into tightly sealed vials for storage at -20°C. Freeze-thaw cycles should be prevented.</li></ul>
<b>Important</b>	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

#### Chemical Data

<b>UniProt ID</b>	Q9NPD7
<b>Source</b>	E. Coli.
<b>Appearance</b>	White lyophilized powder (sterile filtered & freeze-dried)
<b>Formulation</b>	Lyophilized from a 0.2µm filtered concentrated solution in PBS (pH 7.4)

#### References

##### Neuritin 1 promotes neuronal migration

Zito A *et al* (2014) Brain Struct Funct 219(1)

PubMedID

23212301

**Impact of Neuritin 1 (NRN1) polymorphisms on fluid intelligence in schizophrenia**

Chandler D *et al* (2010) Am J Med Genet B Neuropsychiatr Genet 153B(2)

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19569075

**Neuritin, a neurotrophic factor in nervous system physiology**

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24350851

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