

## Recombinant Human NRG1B

Catalog No: C753

Description Recombinant Human Neuregulin-1 beta is produced by our E.coli expression system and the target

gene encoding Ser2-Lys246 is expressed.

Source E.coli

Alternative

Pro-neuregulin-1; Neuregulin-1 beta 1; NRG1-beta 1; HRG1-beta 1; EGF; NRG1; GGF; HGL; HRGA;

name NDF; SMDF;

Accession No. AAA58639.1

Formulation Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

Reconstitution Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100µg/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Quality Purity: Greater than 85% as determined by reducing SDS-PAGE.
Control Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.

**Shipping** The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Background** 

Pro-neuregulin-1,Neuregulin-1 beta 1 (NRG1) is a single-pass type I membrane protein and belongs to the neuregulin family .It contains 1 EGF-like domain and 1 Ig-like C2-type (immunoglobulin-like) domain. Direct ligand for ERBB3 and ERBB4 tyrosine kinase receptors. The protein concomitantly recruits ERBB1 and ERBB2 coreceptors, resulting in ligand-stimulated tyrosine phosphorylation and activation of the ERBB receptors. The multiple isoforms perform diverse functions such as inducing growth and differentiation of epithelial, glial, neuronal, and skeletal muscle cells; inducing expression of acetylcholine receptor in synaptic vesicles during the formation of the neuromuscular junction; stimulating lobuloalveolar budding and milk production in the mammary gland and inducing differentiation of mammary tumor cells; stimulating Schwann cell proliferation; implication in the development of the myocardium such as trabeculation of the developing heart. Isoform 10 may play a role in motor and sensory neuron development.

## **SDS-Page**



