

## Recombinant Human Pro-Neuregulin-1/NRG1-β1 Protein (aa 2-246)

Catalog No. PKSH032939

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

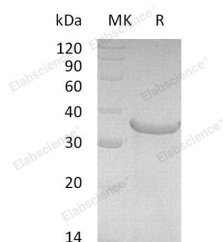
### Description

<b>Synonyms</b>	Pro-neuregulin-1;Neuregulin-1 beta 1;NRG1-beta 1;HRG1-beta 1;EGF;NRG1;GGF;HGL;HRGA;NDF;SMDF;
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Ser2-Lys246
<b>Accession</b>	AAA58639.1
<b>Calculated Molecular Weight</b>	26.9 kDa
<b>Observed molecular weight</b>	34 kDa
<b>Tag</b>	None
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 85 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 0.01 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 85 % as determined by reducing SDS-PAGE.

### Background

Pro-neuregulin-1;Neuregulin-1 beta 1 (NRG1) is a single-pass type I membrane protein and belongs to the neuregulin

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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.