

**Recombinant Human Pro-Neuregulin-1/NGR1--β1 Protein (aa 1-246, His Tag)(Active)**

Catalog No. PKSH032940

*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>	Met 1-Lys246
<b>Accession</b>	Q02297-6
<b>Calculated Molecular Weight</b>	29.0 kDa
<b>Observed molecular weight</b>	38 kDa
<b>Tag</b>	N-6His
<b>Bioactivity</b>	Immobilized Human NRG1Beta-His at 10µg/ml(100 µl/well) can bind Human HER3-Fc(Cat: PKSH033438). The ED50 of Human Glypican-3-His is 5. 18 ug/ml.

**Properties**

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 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 4mM HCl. 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.

**Background**

neuregulin-1 (heregulin-1;NRG1) is a member of neuregulin family; which is comprised of four genes that encode a large number of secreted or membrane-bound isoforms. All family members share an EGF-like domain that interacts with the ErbB family of tyrosine kinase receptors. NRG1 isoforms can be classified into type I; type II and type III isoforms. NRG1 directs ligand for ERBB3 and ERBB4 tyrosine kinase receptors; concomitantly recruits ERBB1 and ERBB2 coreceptors; resulting in ligand-stimulated tyrosine phosphorylation and activation of the ERBB receptors. NRG proteins show distinct spatial and temporal expression patterns and play important roles during development of both the nervous system and the heart.

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