

# Human Heregulin Beta 1, His Tag, E. coli

Catalog Number LDG185PHE

Package 5 μg / 20 μg / 100 μg / Customized package

For full product information, images and publications, please visit our website.



# **Specifications**

**Species of Origin** 

Human

**Affinity Tag** 

His Tag (C-term)

**Purity** 

>95% as determined by SDS-PAGE analysis.

**Activity** 

Measure by its ability to induce MCF-7 cells proliferation. The ED $_{50}$  for this effect is < 10 ng/mL.

**Form** 

Lyophilized

**Expression System** 

Escherichia coli

**Storage Buffer** 

Lyophilized from a 0.2  $\mu m$  filtered solution of PBS, pH 7.4.

Molecular weight

The protein has a calculated MW of 8.42 kDa. The protein migrates as 8 kDa under reducing condition (SDS-PAGE analysis).

**Endotoxin Level** 

<1.0 EU per 1  $\mu g$  of the protein by the LAL method.

Background



#### **Background**

Neuregulin-1 (NRG-1, also called heuregulin1 or neu differentiation factor) is a glycoprotein that belongs to the neuregulins family. Structurally, Neuregulin-1 harbors tissue-specific N terminal sequence, followed by immunoglobulin-like (Iglike) domains, an EGF-like domain, a transmembrane domain, and a cytoplasmic domain. NRG1 has multiple isoforms produced by alternative splicing. Heregulin- β1 (HRG- β1) is one of the isoforms, has been reported to engage the development and survival of cardiomyocytes derived from embryonic stem (ES) cells via activating MAPK-ERK and PI3K-AKT pathways. Moreover, HRG- β1 plays a central role in promoting the proliferation of neuronal progenitors from embryonic neural stem cells.

**Synonyms** 

NRG1 Beta 1, Heregulin-β1

**Uniprot ID** 

#Q02297-6

**Sequence Note** 

Ser177-Glu241

#### Instruction

#### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile  $H_2O$  to a concentration not less than 200  $\mu$ g/mL and incubate the stock solution for at least 20 min to ensure sufficient redissolved.

### Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.



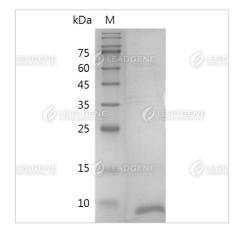
### **Stability & Storage**

This product is stable after storage at:

- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

# **Image**



SDS-PAGE analysis of recombinant human Heregulin beta 1.

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