

## Human NRG1 Protein, Tag Free, E. coli

**Catalog Number** LDG178PHE

**Package** 100 µg

For full product information, images and publications, please visit [our website](#).



### Specifications

#### Species of Origin

Human

#### Affinity Tag

Tag Free

#### Purity

>95% as determined by SDS-PAGE analysis.

#### Endotoxin level

<1 EU per 1 µg of the protein by the LAL method.

#### Expression system

Escherichia coli

#### Buffer

Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

#### Molecular weight

The protein has a calculated MW of 24.29 kDa. The protein migrates as 28-30 kDa under reducing condition (SDS-PAGE analysis).

#### Form

Lyophilized

### Background

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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 (Ig-like) domains, an EGF-like domain, a transmembrane domain, and a cytoplasmic domain. Neuregulin-1 exerts its actions upon engagement of its EGF-like domain to the extracellular binding region of HER RTK family members (EGFR, HER2, HER3, and HER4), subsequently leading to receptor dimerization which activates a variety of signal pathways such as MAPK-ERK and PI3K-AKT pathways. These signal cascades are essential for regulating cardiac development, neuronal differentiation, neuromuscular synapses formation, and stem cell proliferation.

### Uniprot ID

#Q02297

### Synonyms

Acetylcholine receptor-inducing activity (ARIA), Breast cancer cell differentiation factor p45, Glial growth factor, Heregulin (HRG), Neu differentiation factor, Sensory and motor neuron-derived factor

### Sequence Note

Ser20-Lys241

## Instruction

### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H<sub>2</sub>O to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.

### Shipping

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

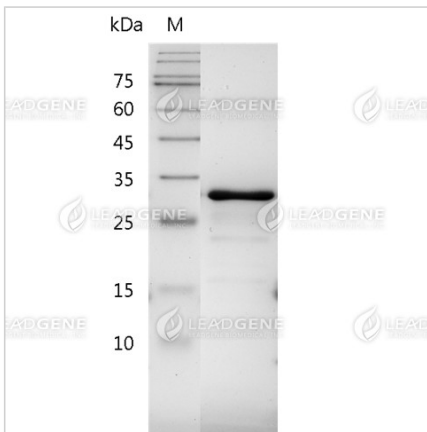
### Stability & Storage

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 human NRG1 protein.

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