

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

Storage 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



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. 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.

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

Uniprot ID

#Q02297

Sequence Note

Ser20-Lys241

Instruction

Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H_2O to a concentration not less than 200 μ 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 human NRG1 protein.

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