

Human recombinant NRG1 protein, AF

Catalog Number: PROTQ02297-4

Overview

Product Name	Human recombinant NRG1 protein, AF
Description	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.
Size	5ug,20ug,100ug
Tag	Tag Free
Form	Lyophilized
Source	Escherichia coli
Formulation	The protein was lyophilized from a 0.2 um filtered solution containing 1X PBS, pH 7.4. If you have any concerns or special requirements, please confirm with us.

Storage

Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

Purity

>95% as determined by SDS-PAGE.

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).

Activity

Testing in process

Endotoxin

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

Amino Acid Sequence

A DNA sequence encoding Human NRG1 Protein (#Q02297)(Ser20-Lys241) was expressed.

Reconstitution

Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H₂O to a concentration not less than 100 ug/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved. Do Not Vortex!

Vigorous shaking may impair the biological activity of the protein.

Usage

Boster's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

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