Recombinant Human NRG1 Protein (Ser20-Lys241), Animal-free, Carrier-free

Cat. No. NRG1-142H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human NRG1 Protein (Ser20-Lys241) without tag was expressed in E. coli and Animal-free as well as Carrier-free.
Species	Human
Source	E.coli
ProteinLength	Ser20-Lys241
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.
Form	Lyophilized
Molecular Mass	The protein has a calculated MW of 24.29 kDa.

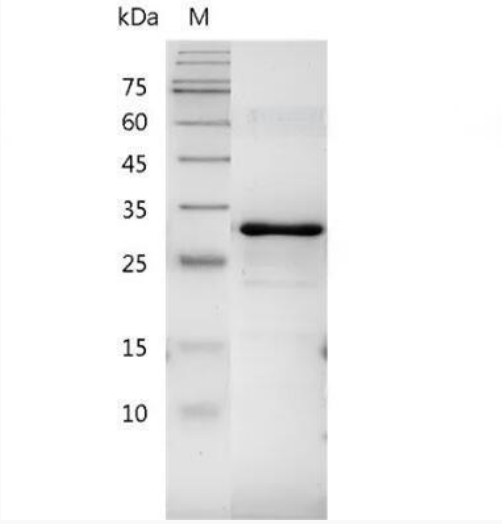
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	The protein migrates as 28-30 kDa under reducing condition (SDS-PAGE analysis).
Endotoxin	< 1 EU/μg of the protein by the LAL method.
Purity	>95% as determined by SDS-PAGE analysis.
Storage	This product is stable after storage at: -20 centigrade for 12 months in lyophilized state from date of receipt. -20 or -80 centigrade for 1 month under sterile conditions after reconstitution. Avoid repeated freeze/thaw cycles.
Storage Buffer	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile H2O 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 centigrade or lower for long term storage.

GENE INFORMATION

Gene Name	NRG1 neuregulin 1 [Homo sapiens (human)]
Official Symbol	NRG1
Synonyms	NRG1; neuregulin 1; HGL; pro-neuregulin-1, membrane-bound isoform; GGF; HRG; NDF; MSTP131; pro-NRG1; glial growth factor; neu differentiation factor; neuregulin 1 type IV beta 3; neuregulin 1 type IV beta 1a; sensory and motor neuron derived factor; heregulin, alpha (45kD, ERBB2 p185-activator); ARIA; GGF2; HRG1; HRGA; SMDF; MST131;

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Gene ID	3084
mRNA Refseq	NM_001159995
Protein Refseq	NP_001153467
MIM	142445
UniProt ID	Q02297
SDS-PAGE analysis of human NRG1 protein.	

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