

Active Recombinant Human NRG1 Protein (Ser177-Glu241), C-His tagged, Animal-free, Carrier-free

Cat. No. NRG1-141H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human NRG1 Protein (Ser177-Glu241) with C-His tag was expressed in E. coli and Animal-free as well as Carrier-free.
Species	Human
Source	E.coli
ProteinLength	Ser177-Glu241
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. 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.
Form	Lyophilized
Bio-activity	Measure by its ability to induce MCF-7 cells proliferation. The ED50 for this effect is <

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	10 ng/mL.
Molecular Mass	The protein has a calculated MW of 8.42 kDa. The protein migrates as 8 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.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile H ₂ 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 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;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

SMDF; MST131;

Gene ID 3084

mRNA Refseq NM_001159995

Protein Refseq NP_001153467

MIM 142445

UniProt ID Q02297

**SDS-PAGE analysis
of recombinant
human Heregulin
beta 1.**

kDa M

75

60

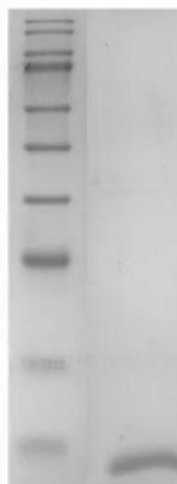
45

35

25

15

10



 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA