

## Neuregulin 1 beta Active Protein | NRG1 active protein

Human Neuregulin 1 beta Recombinant

CATALOG #  
**AAA14425**

HOST  
**Human**

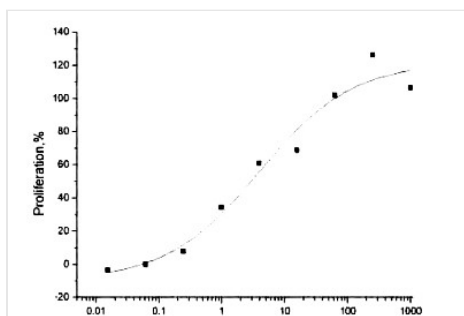
### PRODUCT SYNONYMS

Neuregulin 1 beta; Human Neuregulin 1 beta Recombinant; neuregulin; nrg1; nrg-1; heregulin; hrg; NRG1 active protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                             |
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| Host                    | Human                                                                                                                                                                                                                                                                                                       |
| Purity/Purification     | >95%, as determined by SDS-PAGE                                                                                                                                                                                                                                                                             |
| Form/Format             | Recombinant Human NRG1 is supplied as lyophilized 0.2 um filtered PBS solution, pH7.2.                                                                                                                                                                                                                      |
| Sequence Length         | 607                                                                                                                                                                                                                                                                                                         |
| Host Note               | (Host protein expression may be lot-specific and can be subject to change during production, including bulk orders)                                                                                                                                                                                         |
| Source                  | Optimized DNA sequence encoding Human NRG1 mature chain >sp Q02297 2-246 was expressed in CHO cells                                                                                                                                                                                                         |
| Endotoxin               | Endotoxin content was assayed using a LAL gel clot method. Endotoxin level was found to be less than 0.1 ng/ug(1EU/ug).                                                                                                                                                                                     |
| Reconstitution          | A quick spin of the vial followed by reconstitution in distilled water to a concentration not less than 0.1 mg/mL. This solution can then be diluted into other buffers.                                                                                                                                    |
| Preparation and Storage | Store at Room Temperature for 3 weeks or lyophilized at -20 degree C for 12 months.<br>After reconstitution , Store at 2-8 degree C for 3 weeks or at -20 degree C for 12 months.<br>(*)For long term storage we recommend the addition of a carrier protein at 0.1%. (*)Avoid repeated freeze/thaw cycles. |

### IMAGES



#### Activity

The ED(50) was determined by the dose-dependent proliferation of human MCF-7 cells was found to be

### ADDITIONAL INFORMATION

Product Categories/Family for NRG1  
active protein

Cytokines

|            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| References | <ul style="list-style-type: none"> <li>• the tyrosine phosphatase shp2 (ptpn11) directs <b>Neuregulin-1</b>/erbB signaling throughout schwann cell development .<i>PNAS</i>, Sep 2009; 10.1073/pnas.0904336106.</li> <li>• <b>Neuregulin-1?</b> is associated with disease severity and adverse outcomes in chronic heart failure .<i>Circulation</i>, Jul 2009; 120: 310 - 317.</li> <li>• the relationship among neuregulin 1–stimulated phosphorylation of akt, psychosis proneness, and habituation of arousal in nonclinical individuals .<i>Schizophr Bull</i>, Jun 2009; 10.1093/schbul/sbp063.</li> <li>• sensory axon-derived <b>Neuregulin-1</b> is required for axoglial signaling and normal sensory function but not for long-term axon maintenance .<i>J. Neurosci.</i>, Jun 2009; 29: 7667 - 7678.</li> <li>• downregulation of neuregulin 1 in retinal ganglion cells in experimental glaucoma .<i>Invest. Ophthalmol. Vis. Sci.</i>, Apr 2009; 50: 2075.</li> </ul> |
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NCBI AND UNIPROT INFORMATION

|                            |                                                                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                  | 236461509                                                                                                                                                                         |
| NCBI GeneID                | 3084                                                                                                                                                                              |
| NCBI Accession #           | NP_001153467.1                                                                                                                                                                    |
| NCBI GenBank Nucleotide #  | NM_001159995.1                                                                                                                                                                    |
| UniProt Accession #        | Q02297; O14667; P98202; Q02298; Q02299; Q07110; Q07111; A5YAK4; A5YAK5; A8K1L2; B7Z4Z3; E9PHH4; Q53F54; Q6ICV5; Q6PK61; Q7RTV8; Q7RTW3; Q7RTW4; Q7RTW5; Q7Z2R7; Q86WJ0            |
| Molecular Weight           | Molecular Weight Note: Recombinant Human NRG1 contains 245 amino acids and migrates due to glycosylation as an approximately 50 kDa protein under reducing conditions in SDS-PAGE |
| NCBI Official Full Name    | pro-neuregulin-1, membrane-bound isoform isoform HRG-beta1c                                                                                                                       |
| UniProt Protein Name       | Pro-neuregulin-1, membrane-bound isoform                                                                                                                                          |
| UniProt Gene Name          | <b>NRG1</b>                                                                                                                                                                       |
| UniProt Synonym Gene Names | GGF; HGL; HRGA; NDF; SMDF; Pro-NRG1; ARIA; HRG                                                                                                                                    |
| UniProt Entry Name         | NRG1_HUMAN                                                                                                                                                                        |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.