

# Recombinant Human Pro-neuregulin-1/NRG1 (Alpha1) Protein

Catalog No.: RP00055 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	3084	Q02297

### Tags

No tag

### Synonyms

NRG1;ARIA;GGF;GGF2;HGL;HRG;HRG1;HRGA;MST131;MSTP131;NDF;NRG1-IT2;SMDF

## Product Information

Source	Purification
<i>E. coli</i>	> 95% by SDS-PAGE.

### Endotoxin

< 1.0 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.22 μm filtered solution of 20mM Tris, 150mM NaCl, 5% glycerol, pH 8.0. Contact us for customized product form or formulation.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

## Background

The protein is a membrane glycoprotein that mediates cell-cell signaling and plays a critical role in the growth and development of multiple organ systems. An extraordinary variety of different isoforms are produced from this gene through alternative promoter usage and splicing. These isoforms are expressed in a tissue-specific manner and differ significantly in their structure, and are classified as types I, II, III, IV, V and VI.

## Basic Information

### Description

Active Recombinant Human Pro-neuregulin-1/NRG1 Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Ser177-Lys241) of human NRG1-alpha/HRG1-alpha (Accession #NP\_039258.1).

### Bio-Activity

Measured in a serum-free cell proliferation assay using MCF-7 human breast cancer cells. The ED<sub>50</sub> for this effect is typically 6.2-24.7 ng/mL, corresponding to a specific activity of 4.0×10<sup>4</sup>-1.61×10<sup>5</sup> units/mg.

### Storage

Store the lyophilized protein at -20°C to -80 °C for long term.

After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week.

Avoid repeated freeze/thaw cycles.

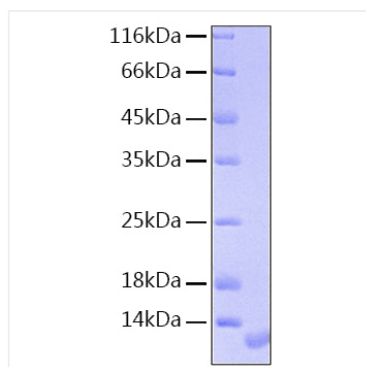
## Contact

☎ | 400-999-6126

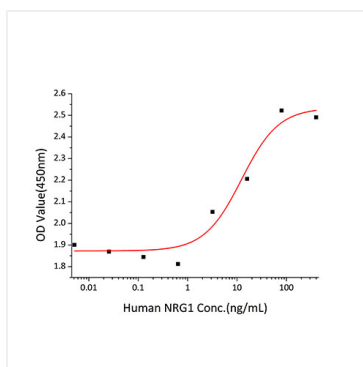
✉ | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)

🌐 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Validation Data



Active Recombinant Human Pro-neuregulin-1/NGR1 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at approximately 8 kDa.



Recombinant Human NRG1 stimulates cell proliferation of the MCF-7 human breast cancer cells. The  $ED_{50}$  for this effect is typically 6.2-24.7 ng/mL, corresponding to a specific activity of  $4.0 \times 10^4$ - $1.61 \times 10^5$  units/mg.