

NRG1 beta 1 Protein, Human, Recombinant (aa 176-246)

General Information

Synonyms:	MST131;SMDF;GGF;HRG;HRG1;Heregulin beta-1;HGL;ARIA;GGF2;NDF;HRGA;NRG1-IT2;MSTP131
Protein Construction:	A DNA sequence encoding the Human NRG1 (Q02297-6) (Thr176-Lys246) was expressed with an N-terminal Met.
Species:	Human
Expression Host:	E. coli
Accession:	Q02297-6
Molecular Weight:	8.37 kDa (predicted)

QC Testing

Biological Activity:	Measured in a cell proliferation assay using MCF-7 cells. The ED50 for this effect is typically 0.1-1 ng/mL.
Purity:	≥ 95% as determined by SDS-PAGE. ≥ 95% as determined by SEC-HPLC.
Endotoxin:	< 10 EU per mg of the protein.
Formulation:	Lyophilized from sterile 30% Acetonitrile, 1/1000 TFA. Please contact us for any concerns or special requirements. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hardcopy of datasheet or the lot-specific COA.

Preparation and Storage

Reconstitution:

Please refer to the lot-specific COA.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Neuregulin 1 or NRG1 is one of four proteins in the neuregulin family that act on the EGFR family of receptors. This growth factor was originally identified as a 44-kD glycoprotein that interacts with the NEU / ERBB2 receptor tyrosine kinase to increase its phosphorylation on tyrosine residues. NRG1 is a trophic factor that has been implicated in neural development, neurotransmission, and synaptic plasticity. NRG1 has multiple isoforms that are

A DRUG SCREENING EXPERT

generated by the usage of different promoters and alternative splicing of a single gene. Neuregulin 1 (NRG1) is essential for the development and function of multiple organ systems, and its dysregulation has been linked to diseases such as cancer and schizophrenia. NRG1 is a schizophrenia candidate gene and plays an important role in brain development and neural function. Schizophrenia is a complex disorder, with etiology likely due to epistasis.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481