

# **BACKGROUND:**

Neuregulin 1-beta (NRG-1 $\beta$ ) is one of many alternatively-spliced isoforms of the NRG1 gene and contains a soluble EGF-like domain. The EGF-like domain of NRG-1 $\beta$  signals through the ErbB2, ErbB3, and ErbB4 receptor tyrosine kinases. NRG-1 $\beta$  is an important growth factor involved in neuroinflammation, nerve regeneration, and cardiovascular processes.

Recombinant human Neuregulin 1-beta is a nonglycosylated protein monomer, containing 66 amino acids and having a molecular mass of 7.6 kDa.

#### Cat. No.: RP1046

#### **Alternate Names:**

NGR beta 1, heregulin, HRG1 beta

#### **AA Sequence:**

MSHLVKCAEK	EKTFCVNGGE	CFMVKDLSNP
SRYLCKCPNE	FTGDRCQNY	MASFYKHLGI
EFMEAE		

# **TECHNICAL INFO**

# Source:

E. coli

## **Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

#### Formulation:

0.1% Trifluoroacetic Acid (TFA)

#### Stability:

Lyophilized product is very stable at  $-20^{\circ}$ C. Reconstituted material should be aliquoted and frozen at  $-20^{\circ}$ C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

#### **Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/mL, which can be further diluted into other aqueous solutions.

#### **Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

## Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

#### Animal Component-Free

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

