

NRG-1 β 2, Human

Cat. No.: Z02747-1

Size: 1.0 mg

Synonyms: NRG-1 EGF-like domain (NRG-1 β 2), Human;

Description:

Neuregulin is a signaling protein for ErbB2/ErbB4 receptor heterodimers on the cardiac muscle cells, playing an important role in heart structure and function through inducing ErbB2/ErbB4 receptor phosphorylation and cardiomyocyte differentiation. Research on molecular level discovered that recombinant neuregulin could make disturbed myocardial cell structure into order and strengthen the connection between myocardial cells by intercalated discs re-organization.

Amino Acid Sequence:

00001 SHLVKCAEKE KTFVNGGEC FMVKDLSNPS RYLCKCPNEF
00041 TGDRQCQNYVM ASFYKAEELY Q

Source: *E. coli*

Species: Human

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ as determined by a cell proliferation assay using serum free human MCF-7 cells is less than 50 ng/ml, corresponding to a specific activity of > 2.0 × 10⁴ IU/mg.

Molecular Weight: Approximately 7.0 kDa, a single non-glycosylated polypeptide chain containing 61 amino acids.

Formulation: Lyophilized from a 0.2 μ m filtered solution in 20 mM PB, pH 7.0, containing 0.5 % HAS and 2 % mannitol.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at \leq -20 °C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 96 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/ μ g of rHuNRG-1 β 2 as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.