

32-1620: NRG1 Recombinant Protein

Alternative Name : Neuregulin-1, NRG1, GGF, HGL, HRGA, NDF, SMDF, HRG, ARIA, GGF2, HRG1.

Description

Source : Escherichia Coli. Recombinant Human Neuregulin-1 beta 2 produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 61 amino acids and having a total molecular mass of 7055 Dalton. NRG-1 is purified by proprietary chromatographic techniques. 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 neuregulin recombinant could make disturbed myocardial cell structure into order and strengthen the connection between myocardial cells by intercalated discs re-organization. Pharmacodynamic experiments in animals showed that neuregulin (NRG1) recombinant can reduce the degree of damage on myocardial cells caused by ischemia, hypoxia and viral infection.

Product Info

Amount :	50 µg
Purification :	Greater than 96.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Content :	Lyophilized from a 0.2µm filtered solution in 20mM PB, pH 7.4, containing 150mM NaCl.
Storage condition :	Lyophilized NRG1 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Heregulin should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.
Amino Acid :	shlvkcaekctfcvnggecfmvkdlsnpsrylckcpneftgdrqnyvmasykaeelyq.

Application Note

It is recommended to reconstitute the lyophilized NRG1 in sterile 18MΩ·cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. The ED₅₀ as determined by a cell proliferation assay using serum free human MCF-7 cells is less than 50ng/ml, corresponding to a specific activity of > 2.0 × 10⁴ IU/mg.

