

Recombinant Human NRG-1 (EGF-like domain)

(rhNRG-1)

Catalog Number: 107-10

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.

Synonyms ARIA, GGF, GGF2, HGL, HRG, HRG1, HRGA, MST131, NDF, SMDF

AA Sequence SHLVKCAEKE KTFCVNGGEC FMVKDLSNPS RYLCKCPNEF TGDRCQNYVM

ASFYKAEELY Q

Source Escherichia coli

Molecular Weight Approximately 7kDa, a single non-glycosylated polypeptide chain containing 61 amino acids.

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

Biological Activity Fully biologically active. Specific activity of 1.2 x 10⁴ units/mg, as determined by human

MCF-7 cell proliferation under serum-free conditions

Physical Appearance White lyophilized powder.

Formulation Lyophilized from a 0.2µm filtered solution (0.25mg/ml) in 20mM PB, pH 7.0, containing

0.5% HSA and 2% mannitol.

Endotoxin < 1EU/μg of growth factor as determined by LAL method.

Reconstitution Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0

mg/mL.

Storage Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For

maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.

Usage This product is for research use only. It is not approved for use in humans, animals, or *in vitro*

diagnostic procedures.