



## Technical Data Sheet

### Recombinant Human NRG-1 EGF-like domain (rHu NRG-1)

#### *Human NRG-1 ( EGF-like domain)*

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.

<b>Catalog Number:</b>	RC218-21
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	7,005 Da, a single non-glycosylated polypeptide chain containing 61 amino acids.
<b>Quantity:</b>	10µg/50µg/1mg
<b>Purity:</b>	>96% by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The activity measured by its ability to stimulate the proliferation of human MCF-7 cells grown under serum-free conditions corresponding to a specific activity of $1.2 \times 10^4$ Units/mg.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2µm filtered solution (0.25mg/ml) in 20mM PB, pH 7.0, containing 0.5% HAS and 2% mannitol.
<b>Endotoxin:</b>	Less than 1EU/µg of rHuNRG-1 as determined by LAL method.
<b>Reconstitution:</b>	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 $\leq -20^\circ\text{C}$ . Further dilutions should be made in appropriate buffered solutions.
<b>Storage:</b>	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. <b>Avoid repeated freeze/thaw cycles.</b>
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