

Technical Data Sheet

Flogen[®] Recombinant Human Neuregulin-1beta2 EGF-like domain (rHuNRG-1β2)

Catalog Number:	PGR0107-010
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 7.0k Da, a single non-glycosylated polypeptide chain containing 61 amino acids.
Quantity:	10μg/50μg/1mg
AA Sequence:	SHLVKCAEKE KTFCVNGGEC FMVKDLSNPS RYLCKCPNEF TGDRQCQNYVM ASFYKAEELY Q
Purity:	>96% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ determined by a cell proliferation assay using serum free human MCF-7 cells is less than 83 ng/ml, corresponding to a specific activity of > 1.2 × 10 ⁴ IU/mg.
Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2μm filtered solution in 20mM PB, pH 7.0, containing 0.5% HAS and 2% mannitol.
Endotoxin:	Less than 1EU/μg of rHuNRG-1/HRG1-βas determined by LAL method.
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 ≤-20°C. Further dilutions should be made in appropriate buffered solutions.
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.
Usage:	This material is for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Human Neuregulin-1 EGF-like domain/Heregulin-beta1

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.