Heregulin-β1, Human, Recombinant

Cat. No. : PCK373

General Information

Synonyms	Pro-neuregulin-1; Neuregulin-1 beta 1;NRG1-beta 1;HRG1-beta 1; EGF;NRG1;GGF;HGL; HRGA;NDF;SMDF;Heregulin-β1
Species	Human
Expression host	E.coli
Sequence	A DNA sequence encoding Human Heregulin Beta 1 Protein (#Q02297-6) (Ser177-Glu241) was expressed with polyhistidine tag at the C-terminus.
Accession	Q02297-6
Tag	His Tag (C-term)
Mol mass	8.42 kDa
Expiration date	12 months
Bio activity	Measure by its ability to induce MCF-7 cells proliferation. The ED for this effect is < 10 ng/mL.

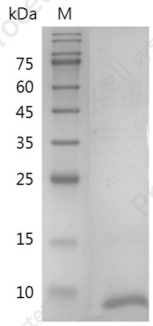
Product feature

Purity	>95% as determined by SDS-PAGE. Ni-NTA chromatography.
Endotoxin (EU/μg)	< 0.1
Storage	Lyophilized protein should be stored at -5~-20°C for 1 year. Upon reconstitution, store at 2-8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10% FBS, 5% HSA or 5% trehalose solution), protein aliquots should be stored at -5~-20°C or -80°C for 3-6 months.
Shipping	Ice bag
Formulation	The protein was lyophilized from a 0.2 μm filtered solution containing 1 × PBS, pH8.0.
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 100 μg/mL. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Background

Neuregulin-1 (NRG-1, also called heuregulin1 or neu differentiation factor) is a glycoprotein that belongs to the neuregulins family. Structurally, Neuregulin-1 harbors tissue-speci?c N terminal sequence, followed by immunoglobulin-like (Ig-like) domains, an EGF-like domain, a transmembrane domain, and a cytoplasmic domain. NRG1 has multiple isoforms produced by alternative splicing. Heregulin-β1 (HRG-β1) is one of the isoforms, has been reported to engage the development and survival of cardiomyocytes derived from embryonic stem (ES) cells via activating MAPK-ERK and PI3K-AKT pathways. Moreover, HRG-β1 plays a central role in promoting the proliferation of neuronal progenitors from embryonic neural stem cells.

SDS-PAGE



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