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Recombinant Human Heregulinβ-1

Catalog # PBG10156

Specification

Recombinant Human Heregulinβ-1 - Product Information

Recombinant Human Heregulinβ-1 - Additional Information

Description
Neuregulin/Heregulin is a family of structurally related polypeptide growth factors derived from alternatively spliced genes (NRG1, NRG2, NRG3 and NRG4). To date, there are over 14 soluble and transmembrane proteins derived from the NRG1 gene. Proteolytic processing of the extracellular domain of the transmembrane NRG1 isoforms release soluble growth factors. HRG1-β1 contains an Ig domain and an EGF-like domain that is necessary for direct binding to receptor tyrosine kinases erb3 and erb4. This binding induces erb3 and erb4 heterodimerization with erb2, stimulating intrinsic kinase activity, which leads to tyrosine phosphorylation. Although HRG1-β1 biological effects is still unclear, it has been found to promote motility and invasiveness of breast cancer cells which may also involve up-regulation of expression and function of the autocrine motility-promoting factor (AMF). Recombinant human Heregulin-β1 (HRG1-β1) is a 7.5 kDa polypeptide consisting of only the EGF domain of Heregulin-β1 (65 amino acid residues).

BiologicalActivity
The ED₅₀ was determined by the dose-dependent stimulation of the proliferation of human MCF-7 cells is ≤ 0.5 ng/ml, corresponding to a specific activity of ≥ 2 x 10⁶units/mg.

Authenticity
Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin
Endotoxin level is <0.1 ng/ μg of protein (<1EU/ μg).

Protein Content
Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage
-20°C

Precautions
Recombinant Human Heregulinβ-1 is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human Heregulinβ-1 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Recombinant Human Heregulinβ-1 - Images