Human Heparin-Binding EGF-Like Growth Factor

SIZE	CAT. NO.
10 µg	RP1180-10
100 µg	RP1180-100
1000 µg	RP1180-1000

BACKGROUND:

Heparin-binding epidermal growth factor-like growth factor (HB-EGF) is a member of the epidermal growth factor (EGF) family and is expressed by monocytes and macrophages. HB-EGF is the predominant growth factor involved in epithelialization during wound healing. HB-EGF signals through the receptor tyrosine kinase ErbB2 to maintain adult heart homeostasis, and promotes cardiac valve development through binding in high affinity to the epidermal growth factor receptor (EGFR). HB-EGF binds the the ErbB4 receptor tyrosine kinase to mediate implantation of the human blastocyst. HB-EGF also functions as a potent mitogen for fibroblasts and smooth muscle cells.

Recombinant human XYZ is a non-glycosylated protein monomer, containing 87 amino acids and having a molecular mass of 9.5 kDa.

Cat. No.:
RP1180

Alternate Names:
HBEGF, Diphtheria toxin receptor, DT-R

AA Sequence:
MDLQEADLDL LRVTLSSKPQ ALATPNKEEH GKRKKK GKGL GKKRDPCLRK YKDFCIHGEC KYVKELRAPS CI CHPGYHGERCHGLSL

TECHNICAL INFO

Source:
E. coli

Physical Appearance:
Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:
10 mM sodium phosphate, pH 7.5

Stability:
Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:
Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:
- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:
Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:
The activity is measured by dose-dependent BALB/c 3T3 cell proliferation, with Bioactivity Acceptance Criteria ED50 at 1 ng/mL.