

**Proheparin-Binding EGF-like Growth Factor Human Recombinant**

**CATALOG #:** 4266-10 10 µg  
4266-50 50 µg  
4266-1000 1 mg

**ALTERNATE NAMES:** Proheparin-binding EGF-like growth factor, HBEGF, DTR, DTS, HEGFL, HB-EGF, Heparin-binding EGF-like growth factor, Diphtheria toxin receptor, DT-R, DTSF.

**SOURCE:** Escherichia Coli.

**PURITY:** Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

**FORMULATION:**

The protein was lyophilized from a concentrated (1 mg/ml) solution containing 1x PBS pH-7.4.

**SEQUENCE:**

HB-EGF Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 86 amino acids and having a molecular mass of 9.7kDa. The HB-EGF is purified by proprietary chromatographic techniques

**RECONSTITUTION:**

It is recommended to reconstitute the lyophilized Human HB-EGF in sterile 18M-cm H<sub>2</sub>O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

**BIOLOGICAL ACTIVITY:**

The ED<sub>50</sub> was determined by a cell proliferation assay using balb/c 3T3 cells is < 1.0 ng/ml, corresponding to a specific activity of > 1.0×10<sup>6</sup> units/mg.

**AMINO ACID SEQUENCE:**

DLQEADLDLL RVTLSKPKQA LATPNKEEHG KRKKKGKGLG KKRDPCLRKY KDFCIHGECK YVKELRAPSC ICHPGYHGER CHGLSL.

**STORAGE CONDITIONS:**

Lyophilized Human HB-EGF Recombinant although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution HB-EGF should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**DESCRIPTION:**

HB-EGF is an EGF related growth factor which signals via the EGF receptor, and stimulates the proliferation of SMC (smooth muscle cells), fibroblasts, epithelial cells and keratinocytes. HB-EGF is expressed in various cell types and tissues, including vascular endothelial cells and SMC, macrophages, skeletal muscle, keratinocytes and particular tumor cells. HB-EGF's ability to explicitly bind heparin and heparin sulfate proteoglycans is dissimilar from other EGF-like molecules, and might be related to the enhanced mitogenic activity, relative to EGF, that HB-EGF exerts on smooth muscle cells.

**FOR RESEARCH USE ONLY! Not to be used in humans.**

**RELATED PRODUCTS:**

- HB-EGF, Mouse Recombinant (**Cat. No. 4267-10, 50, 1000**)
- EGF, Human Recombinant (**Cat. No. 4022-100, 500, 5000**)
- EGF, Murine Recombinant (**Cat. No. 4023-100, 500, 5000**)
- EGF, Rat Recombinant (**Cat. No. 4024-100, 500, 5000**)