

## 32-1216: rHB-EGF Recombinant Protein

**Alternative Name :** Proheparin-binding EGF-like growth factor, Heparin-binding EGF-like growth factor, HB-EGF, HBEGF, Dtr, Hegfl, GFHB.

### Description

Source : Escherichia Coli. HB-EGF Rat 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. 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.

### Product Info

**Amount :** 50 µg  
**Purification :** Greater than 95.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.  
**Content :** The protein was lyophilized from a concentrated (1mg/ml) solution containing 1xPBS pH-7.4.  
**Storage condition :** Lyophilized Rat 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.  
**Amino Acid :** DLEGTDLDLF KVAFSSKPQA LATPGKEKNG KKKRKGKGLG KKRDPCLKKY KDYCIHGECR YLKELRIPSC HCLPGYHGQR CHGLTL.

### Application Note

It is recommended to reconstitute the lyophilized Rat 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. The ED<sub>50</sub> as 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.

