

Proheparin-Binding EGF-like Growth Factor Mouse Recombinant

CATALOG #: 4267-10 10 µg
4267-50 50 µg
4267-1000 1 mg

ALTERNATE NAMES: Heparin-binding EGF-like growth factor, DTR, HEGFL, diphtheria toxin receptor (heparin-binding epidermal growth factor-like growth factor), DTSF, proheparin-binding epidermal growth factor-like growth factor.

SOURCE: Escherichia Coli.

PURITY: Greater than 95.0% 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 Mouse Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 86 amino acids (63-148 a.a.) and having a molecular mass of 9.8 kDa.

The HB-EGF is purified by proprietary chromatographic techniques

RECONSTITUTION:

It is recommended to reconstitute the lyophilized Mouse HB-EGF in sterile 18M-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

BIOLOGICAL ACTIVITY:

The ED₅₀ was determined by a cell proliferation assay using balb/c 3T3 cells is < 1.0 ng/ml, corresponding to a specific activity of > 1.0×10⁶ units/mg.

AMINO ACID SEQUENCE:

DLEGTDLNLF KVAFSSKPQG LATPSKERNG KKKKKGKGLG KKRDPCLRKY
KDYCIHGECR YLQEFRTSPC KCLPGYHGHR CHGLTL.

STORAGE CONDITIONS:

Lyophilized Mouse 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, Human Recombinant (**Cat. No. 4266-10, 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**)