DATASHEET
Version 20181206

HB-EGF, Mouse

Cat. No.: Z02943-1

Size: 1.0 mg

Synonyms: Heparin Binding EGF-like growth factor, HBEGF, Diphtheria toxin receptor, DTR

Description:

Heparin-binding EGF-like growth factor (HB-EGF) is a member of the EGF family of proteins. HB-EGF-like growth factor is synthesized as a membrane-anchored mitogenic and chemotactic glycoprotein. An epidermal growth factor produced by monocytes and macrophages, due to an affinity for heparin is termed HB-EGF. It has been shown to play a role in wound healing, cardiac hypertrophy and heart development and function. The transmembrane form of HB-EGF is the unique receptor for diptheria toxin and functions in juxtacrine signaling in cells. Both forms of HB-EGF participate in normal physiological processes and in pathological processes including tumor progression and metastasis, organ hyperplasia, and atherosclerotic disease. HB-EGF can bind two locations on cell surfaces, heparan sulfate proteoglycans and EGF-receptor effecting cell to cell interactions.

Amino Acid Sequence:

```
00001 DLEGTDLNLF KVAFSSKPQG LATPSKERNG KKKKKGKGLG
00041 KKRDPCLRKY KDYCIHGECR YLQEFRTPSC KCLPGYHGHR
00081 CHGLTL
```

Source: *E. coli*

Species: Mouse

Biological Activity: Fully biologically active when compared to standard. The ED_{50} as determined by a cell proliferation assay using murine Balb/c 3T3 cells is less than 1 ng/ml, corresponding to a specific activity of > 1.0×10^6 IU/mg.

Molecular Weight: Approximately 9.8 kDa, a single non-glycosylated polypeptide chain containing 86 amino acids.

Formulation: Lyophilized from a 0.2 μm filtered concentrated solution in 10 mM PB, 500 mM NaCl, pH7.4.

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

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 97 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/μg of rMuHB-EGF as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.

GenScript USA, Inc.
860 Centennial Ave. Piscataway, NJ 08854
Tel: 1-877-436-7274; 1-732-885-9188