

Rev03
Update: Dec,14,2021

DATASHEET

HB-EGF, Mouse

Cat. No.: Z02943

Product Introduction

Species	Mouse
Protein Construction	HB-EGF (Asp63-Leu148) Accession # Q06186
Purity	> 97% as analyzed by SDS-PAGE > 97% as analyzed by HPLC
Endotoxin Level	< 1 EU/μg of protein by LAL method
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 1.0 ng/ml, corresponding to a specific activity of > 1.0 × 10 ⁶ IU/mg.
Expression System	E. coli
Theoretical Molecular Weight	9.8 kDa
Formulation	Lyophilized from a 0.2 μm filtered solution in 10 mM PB, 500 mM NaCl, pH7.4.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Background

Target Background : 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 diphtheria 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.

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

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