Datasheet for ABIN2017931

HBEGF Protein

Go to Product page

Overview

Quantity:	50 µg
Target:	HBEGF
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Sequence:	DLEGTDLNLF KVAFSSKPQG LATPSKERNG KKKKKGKGLG KKRDPCLRKY KDYCIHGECR YLQEFRTPSC KCLPGYHGHR CHGLTL
Characteristics:	Fully biologically active when compared to standard. The ED50 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 x 10^6 IU/mg.
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Sterility:	0.2 µm filtered
Endotoxin Level:	< 1 EU/µg of rMuHB-EGF as determined by LAL method.

Target Details

Target:	HBEGF
Alternative Name:	HB-EGF (HBEGF Products)
Background:	Heparin-binding EGF-like growth factor (HB-EGF) is a member of the EGF family of proteins.

Target Details

	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. Synonyms: Heparin Binding EGF-like growth factor, HBEGF, Diphtheria toxin receptor, DTR
Molecular Weight:	9.8 kDa, a single non-glycosylated polypeptide chain containing 86 amino acids.
Pathways:	RTK Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
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.
Buffer:	Lyophilized from a 0.2 µm filtered concentrated solution in 10 mM PB, 500 mM NaCl, pH 7.4.
Handling Advice:	Avoid repeated freeze/thaw cycles.
Storage:	4 °C/-20 °C
Storage Comment:	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.