

HBEGF

Recombinant Human Heparin-Binding EGF-like Growth Factor

Catalog No.	CS483A CS483B CS483C	Quantity:	10 µg 50 µg 1 mg
Alternate Names:	DTR, DTS, DTSF, EGFL		
Description:	<p>Heparin-binding EGF-like growth factor (HB-EGF) is a member of the EGF family of proteins that in humans is encoded by the HBEGF gene. HB-EGF-like growth factor is synthesized as a membrane-anchored mitogenic and chemotactic glycoprotein. It has been shown to play a role in wound healing, cardiac hypertrophy and heart development and function. First identified in the conditioned media of human macrophage-like cells, HB-EGF is an 87 amino acid glycoprotein which displays highly regulated gene expression. Ectodomain shedding results in the soluble mature form of HB-EGF which influences the mitogenicity and chemotactic factors for smooth muscle cells and fibroblasts. 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.</p> <p>Recombinant Human Heparin-Binding EGF-like Growth Factor is a single non-glycosylated polypeptide chain containing 86 amino acids.</p>		
Gene ID:	1839		
Source:	<i>E. coli</i>		
Molecular Weight:	Approximately 9.7 kDa		
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.4, + 130 mM NaCl.		
Purity:	>97% by SDS-PAGE and HPLC analyses.		
Endotoxin Level:	<1 EU/µg as determined by LAL method.		
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ determined by a cell proliferation assay using mouse BALB/c 3T3 cells is less than 1 ng/ml.		
Specific Activity:	>1.0 x 10 ⁶ IU/mg.		
Amino Acid Sequence:	DLQEADLDLL RVTLSKPKQA LATPNKEEHG KRKKKGKGLG KKRDPCLRKY KDFCIHGECK YVKELRAPSC ICHPGYHGER CHGLSL		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. This depends upon the particular application employed. Further dilutions should be made in appropriate buffered solutions.		

Storage & Stability: This lyophilized preparation is stable at 2-8°C, but should be kept desiccated at -20°C for long term storage. 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 -80°C. **Avoid repeated freeze/thaw cycles.**

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.



Cell Sciences®
480 Neponset Street
Bldg 12A
Canton, MA 02021

Toll Free: 888-769-1246
Phone: 781-828-0610
Fax: 781-828-0542

E-mail: info@cellsciences.com
Website: www.cellsciences.com