Recombinant Human Heparin-Binding EGF-Like Growth Factor

Cat. No. HBEGF-339H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	
Species	Human
Source	Sf21 Cells
Description	Heparin-binding EGF-like growth factor (HB-EGF) is a monomeric heparin binding O-glycosylated protein and a member of the EGF family of proteins. It has been shown to play a role in wound healing, cardiac hypertrophy and heart development and function. HB-EGF contributes to cell adhesion, invasion, and angiogenesis, which are integral to transcoelomic metastasis in ovarian cancer.
Molecular Weight	The predicted molecular weight of Recombinant Human HB-EGF is 9.5 kDa. However, this recombinant protein is heterogenously O-glycosylated and the actual molecular weight as observed by migration on SDS Page is 12 kDa.
Formulation	This recombinant protein was 0.2 μm filtered and lyophilized from modified Dulbecco's phosphate buffered saline (1X PBS) pH 7.2 – 7.3 with no calcium, magnesium, or preservatives present.
State Of Matter	Lyophilized.
Purity	>97% by SDS Page and analyzed by silver stain.
Endotoxin	<1.0 EU/μg as determined by the LAL method.

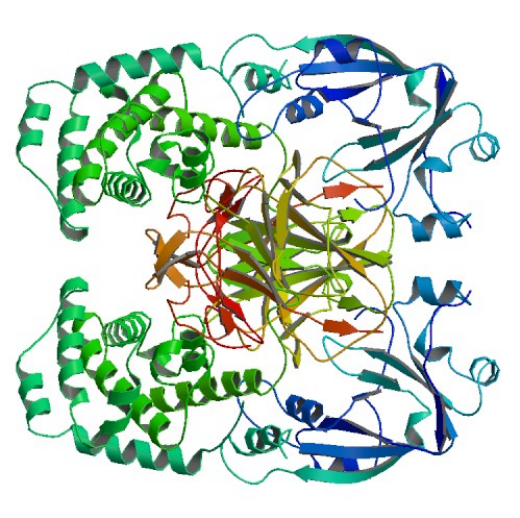
Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Biological Activity	The biological activity of Human HB-EGF was determined by its ability to stimulate proliferation in a mouse fibroblast cell line, Balb/3T3. The expected ED50 for this effect is typically 0.15 - 0.75 ng/mL. The cell number is assessed in a fluorometric assay using the redox sensitive dye, Resazurin.
Storage	This lyophilized protein is stable for six to twelve months when stored desiccated at -20°Cto -70°C. After aseptic reconstitution, this protein may be stored at 2°Cto 8°Cfor one month or at -20°Cto -70°Cin a manual defrost freezer. Avoid Repeated Freeze Thaw Cycles. See Product Insert for exact lot specific storage instructions.

GENE INFORMATION

Gene Name	HBEGF heparin-binding EGF-like growth factor [Homo sapiens]
Synonyms	HBEGF; heparin-binding EGF-like growth factor; DTR; DTS; DTSF; HEGFL; diphtheria toxin receptor (heparin-binding EGF-like growth factor); diphtheria toxin receptor (heparin-binding epidermal growth factor-like growth factor); heparin-binding epidermal growth factor
Gene ID	1839
mRNA Refseq	NM_001945
Protein Refseq	NP_001936
MIM	126150
UniProt ID	Q99075
Chromosome Location	5q23

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Pathway	Epithelial cell signaling in Helicobacter pylori infection; ErbB signaling pathway; GnRH signaling pathway
Function	epidermal growth factor receptor binding; growth factor activity; heparin binding; receptor activity
PDB rendering based on 1xdt.	

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