



Recombinant Human HB-EGF

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FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-185S
Size:	10 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	1839
Synonyms:	HBEGF; DTR; DTS; DTSF; HEGFL

HB-EGF is an EGF related growth factor that signals through the EGF receptor, and stimulates the proliferation of smooth muscle cells (SMC), fibroblasts, epithelial cells, and keratinocytes. HB-EGF is expressed in numerous cell types and tissues, including vascular endothelial cells and SMC, macrophages, skeletal muscle, keratinocytes, and certain tumor cells. The ability of HB-EGF to specifically bind heparin and heparin sulfate proteoglycans is distinct from other EGF-like molecules, and may be related to the enhanced mitogenic activity, relative to EGF, that HB-EGF exerts on smooth muscle cells. The human HB-EGF gene encodes a 208 amino acid transmembrane protein, which can be proteolytically cleaved to produce soluble HB-EGF. Recombinant human HB-EGF is a 9.7 kDa protein containing 86 amino acid residues, corresponding to the extra-cellular EGF-like and heparin binding domains of the full length HB-EGF protein.

Sequence

DLQEADLDDL RVTLSKPKQA LATPNKEEHG KRKKKGKGLG
KKRDPCLRKY KDFCIHGECK YVKELRAPSC ICHPGYHGER CHGLSL

Database References

Protein RefSeq:	NP_001936.1
Uniprot ID:	Q99075
mRNA RefSeq:	NM_001945

Product Specifications

Expressed in	E. coli
Purity	> 95% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng /µg of protein (<1EU/µg).
Formulation	lyophilized
Length (aa):	86
MW:	9.7 kDa

Biological Activity: The ED50 was determined by a cell proliferation assay using balb/c 3T3 cells is ≤ 1.0 ng/ml, corresponding to a specific activity of $\geq 1 \times 10^6$ units/mg.



AVOID REPEATED FREEZE AND THAW CYCLES!