

Recombinant Human HB-EGF

Catalog # PBG10153

## Specification

**Recombinant Human HB-EGF - Product Information** 

## **Recombinant Human HB-EGF - Additional Information**

## Description

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.

BiologicalActivity

The <strong>ED</strong><sub>50</sub> was determined by a cell proliferation assay using balb/c 3T3 cells is  $\leq$  1.0 ng/ml, corresponding to a specific activity of  $\geq$  1 x 10<sup>6</sup> units/mg.

Authenticity Verified by N-terminal and Mass Spectrometry analyses (when applicable).

Endotoxin Endotoxin level is <0.1 ng/  $\mu$ g of protein (<1EU/  $\mu$ g).

**Protein Content** Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage -20°C

Precautions

Recombinant Human HB-EGF is for research use only and not for use in diagnostic or therapeutic procedures.

## **Recombinant Human HB-EGF - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides



- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

**Recombinant Human HB-EGF - Images**