

# PRODUCT DATA SHEET



Bioworld Technology, Inc.

## Recombinant HB-EGF, Human

Catalog Number: BK0073-1mg

Source: Escherichia coli.

Quantity: 1mg

### Description:

Proheparin-binding EGF-like growth factor (HB-EGF), also known as DTR, DTS and HEGFL, is a member of the EGF family of mitogens. It is expressed in macrophages, monocytes, endothelial cells and muscle cells. HB-EGF signals through the EGF receptor to stimulate the proliferation of smooth muscle cells, epithelial cells and keratinocytes. Compared to EGF, HB-EGF binds to the EGF receptor with a higher affinity and has been shown to be more mitogenic, likely due to its ability to bind to heparin and heparin sulfate proteoglycans. HB-EGF has also been reported to act as a diphtheria toxin receptor, mediating endocytosis of the bound toxin. Heparin-binding EGF-like growth factor has been shown to interact with NRD1, Zinc finger and BTB domain-containing protein 16 and BAG1. Recombinant Human HB-EGF produced in E. coli cells is a polypeptide chain containing 86 amino acids. A fully biologically active molecule, rhHB-EGF has a molecular mass of 14 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

### Molecular Weight:

14 kDa, observed by reducing SDS-PAGE.

### Purity:

> 95% as analyzed by SDS-PAGE.

### Biological Activity:

ED50 < 0.75ng/ml, measured in a cell proliferation assay using 3T3 cells.

### Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

### Formulation:

Lyophilized after extensive dialysis against PBS.

### AA Sequence:

GDLQEADLDLLRVTLSSKPQALATPNKEE-  
HGKRKKKGKGLGKKRDPCLRKYKDFCIH-  
GECKYVKELRAPSCICHPGYHGERCHGLSL

### Endotoxin:

< 0.2 EU/μg, determined by LAL method.

### Reconstitution:

Reconstituted in ddH<sub>2</sub>O or PBS at 100 μg/ml.

### Storage:

Lyophilized recombinant Human Proheparin-binding EGF-like Growth Factor (HB-EGF), remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, human HB-EGF should be stable up to 1 week at 4 °C or up to 3 months at -20 °C.

### Usage:

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