

# Recombinant Human HB-EGF Protein

Catalog No.: RP00754    **Recombinant**

## Sequence Information

**Species**    **Gene ID**    **Swiss Prot**  
 Human        1839        Q99075

**Tags**

C-His

**Synonyms**

DTR; DTS; DTSF;  
 HEGFL;HBEGF;DTS;DTSF;HEGFL;HB-EGF

## Background

Heparin-binding EGF-like growth factor (HB-EGF) is a 12-16 kDa member of the epidermal growth factor (EGF) family. It possesses an EGF-like domain, and a heparin-binding motif. Mature HB-EGF is a soluble peptide that arises from proteolytic processing of the transmembrane form. Human HB-EGF shows 76% and 73% sequence identity with rat and mouse HB-EGF, respectively. It is required for normal cardiac valve formation and normal heart function, promotes smooth muscle cell proliferation. It may be involved in macrophage-mediated cellular proliferation; it is mitogenic for fibroblasts, but not endothelial cells. HB-EGF is classified as a group 2 ErbB ligand based on its ability to activate both the EGF/ErbB1 and ErbB4 receptors. Activity associated with ErbB4 binding appears to be limited to non-mitogenic actions, while EGFR binding induces both mitogenic and non-mitogenic activity.

## Product Information

**Source**    **Purification**  
 HEK293 cells     $\geq 95\%$  as  
                   determined by SDS-PAGE.

**Calculated MW**    **Observed MW**  
 15.11 kDa        15-25 kDa

**Endotoxin**

< 1 EU/ $\mu$ g of the protein by LAL method.

**Formulation**

Lyophilized from a 0.2  $\mu$ m filtered solution of PBS, pH7.4. Contact us for customized product form or formulation.

**Reconstitution**

Centrifuge the tube before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze/thaw cycles.

## Basic Information

**Description**

Recombinant Human HB-EGF Protein is produced by Human Cells expression system. The target protein is expressed with sequence (Leu20-Leu148) of human HB-EGF (Accession #Q99075) fused with a 6xHis tag at the C-terminus.

**Bio-Activity**

Measured in a cell proliferation assay using Balb3T3 mouse fibroblast cells. The ED<sub>50</sub> for this effect is 0.15-0.60 ng/mL, corresponding to a specific activity of  $1.67 \times 10^6 \sim 6.67 \times 10^6$  units/mg.

**Shipping**

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

**Storage**

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

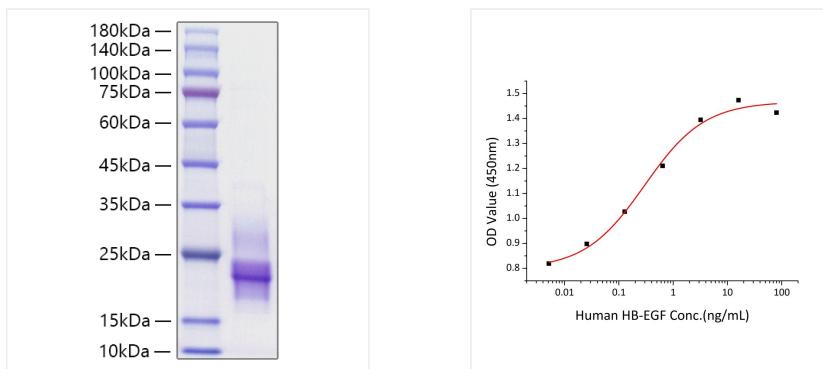
**Operational Notes**

For your safety and health, please wear a lab coat and disposable gloves for handling.

## Contact

	400-999-6126
	<a href="mailto:cn.market@abclonal.com.cn">cn.market@abclonal.com.cn</a>
	<a href="http://www.abclonal.com.cn">www.abclonal.com.cn</a>

## Validation Data



Recombinant Human HB-EGF Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.

Measured in a cell proliferation assay using Balb3T3 mouse fibroblast cells. The ED<sub>50</sub> for this effect is 0.15-0.60 ng/mL, corresponding to a specific activity of  $1.67 \times 10^6$ – $6.67 \times 10^6$  units/mg.