

RP00754

Leader in Biomolecular Solutions for Life Science



Recombinant Human HB-EGF Protein

Catalog No.: RP00754

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	1839	Q99075

Tags

C-His

Synonyms

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

Product Information

Source

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 free-thaw cycles.

Purification

≥ 95 % as determined by SDS-PAGE.

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

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

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% amino acid 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.

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 6×His tag at the C-terminus.

Bio-Activity

Measured in a cell proliferation assay using Balb3T3 mouse fibroblast cells. The ED₅₀ for this effect is 0.15-0.60 ng/mL, corresponding to a specific activity of 1.67×10⁶~6.67×10⁶ units/mg.

Shipping

Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

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

Storage

Store at -20°C
Avoid repeated freeze/thaw cycles.

Reconstitution

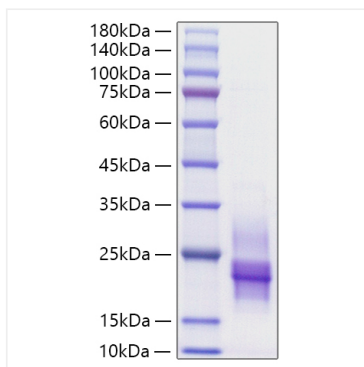
Centrifuge the tube before opening.
Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot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

Contact

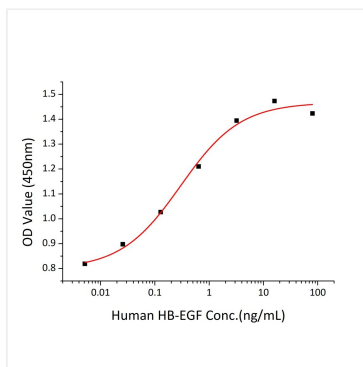


www.abclonal.com

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_{50} 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.