

Rev04  
Update: Mar,01,2022

**DATASHEET**

# HB-EGF, Human

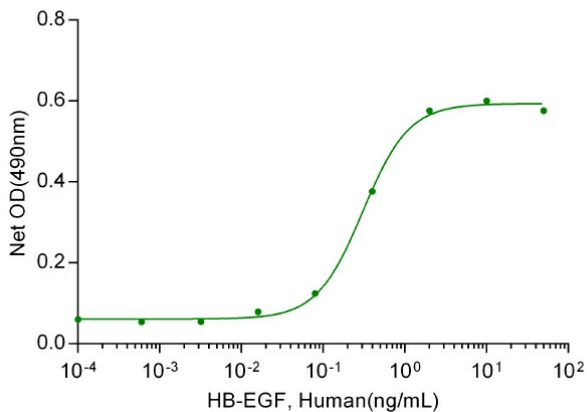
Cat. No.: Z03142

## Product Introduction

<b>Species</b>	Human
<b>Protein Construction</b>	<b>HB-EGF (Asp63-Leu148) Accession # Q99075</b>
<b>Purity</b>	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
<b>Endotoxin Level</b>	< 0.2 EU/μg of protein by gel clotting method
<b>Biological Activity</b>	ED <sub>50</sub> < 0.5 ng/ml, measured in a cell proliferation assay using 3T3 cells.
<b>Expression System</b>	CHO
<b>Theoretical Molecular Weight</b>	9.7 kDa
<b>Apparent Molecular Weight</b>	12~14 kDa, on SDS-PAGE under reducing conditions.
<b>Formulation</b>	Lyophilized after extensive dialysis against PBS.
<b>Reconstitution</b>	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH <sub>2</sub> O or PBS up to 100 μg/ml.
<b>Storage &amp; Stability</b>	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

## Examples

ED<sub>50</sub><0.5 ng/ml, measured in a cell proliferation assay using 3T3 cells.



## Background

**Target Background :** 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.

**Synonyms :** HEGFL; Heparin Binding EGF-like growth factor; HBEGF; Diphtheria toxin receptor; DTR

**For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.**