

## Product Datasheet

### Recombinant HB-EGF, Human (orb1494849)

|                          |   |
|--------------------------|---|
| <b>Description</b>       | 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. |
| <b>Endotoxins</b>        | < 0.2 EU/μg, determined by LAL method.  |
| <b>Preservatives</b>     | Lyophilized after extensive dialysis against PBS.   |
| <b>Form/Appearance</b>   | Lyophilized after extensive dialysis against PBS.   |
| <b>Storage</b>           | 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.   |
| <b>Note</b>              | For research use only   |
| <b>Application notes</b> | Reconstituted in ddH <sub>2</sub> O or PBS at 100 μg/ml.  |
| <b>Protein Sequence</b>  | GD LQEADLDLLR VTLSSKPQAL ATPNKEEHGK RKKKGKGLGK KRDPCLRKYK<br>DFCIHGEEKY VKELRAPSCI CHPGYHGERC HGLSL   |
| <b>Purity</b>            | > 95% as analyzed by SDS-PAGE.  |
| <b>Source</b>            | Escherichia coli.   |

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**MW** 14 kDa, observed by reducing SDS-PAGE.

**Expiration Date** 6 months from date of receipt.

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