

## Recombinant Human HB-EGF (Heparin Binding EGF)

Cat No:HR2R1484

For research use only

### Overview

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| Quantity           | 200 µg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Gene Symbol        | HBEGF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Gene ID            | 1839                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Accession          | Q99075                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Alternative Name   | Heparin Binding EGF-like growth factor, HBEGF, Diphtheria toxin receptor, DTR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Species            | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Source             | E. coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Description        | Human HBEGF (Heparin Binding EGF like growth factor) is a member of the EGF family of peptide growth factors that signal through the EGF receptor, and stimulates the proliferation of smooth muscle cells, fibroblasts, epithelial cells, and keratinocytes. HBEGF is expressed in many cell types and tissues, including bronchial epithelium, visceral and vascular smooth muscle, CD4+ T cells, glomerular podocytes, keratinocytes, macrophages and certain tumor cells. Mature HBEGF is a soluble peptide that arises from the proteolytic processing of the 208 amino acid type-I transmembrane form and exhibits the ability to specifically bind heparin and heparin sulfate proteoglycans. |
| Functions          | The ED50, as determined by a cell proliferation assay (using balb/c 3T3 cells) is ? 1.0 ng/ml, corresponding to a specific activity of ? 1 x 106 units/mg.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Formulation        | Lyophilized from a 0.2 µm filtered solution in PBS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Solubility         | It is recommended to reconstitute HBEGF in sterile PBS at 250 µg/mL.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Appearance         | Lyophilized Powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Molecular Weight   | 10.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Purity             | >95% as determined by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Concentration      | <1.0 EU/µg of recombinant protein as determined by the LAL method.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Shipping Condition | Ambient Temperature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Storage Condition  | The lyophilized protein is stable for at least one year from date of receipt at -70°C. Upon reconstitution, this cytokine can be stored in working aliquots at 2° - 8°C for one month, or at -20°C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                    |