

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

Heparin-binding epidermal growth factor-like growth factor (HBEGF) is synthesized as a transmembrane precursor that is cleaved by a protease to release HBEGF as the ectodomain. Its expression stimulates neurogenesis and is increased after the brain experiences cerebral hypoxia. HBEGF is known to participate in a variety of normal physiological processes such as blastocyst implantation and wound healing, as well as in pathological processes such as tumor growth, SMC hyperplasia and atherosclerosis. HBEGF is a glycoprotein exhibiting mitogenic and chemotactic activity in smooth muscle cells and fibroblasts.

| | |
|----------------------------|--|
| Catalog Number | 1150-14 |
| Product Name | HBEGF, Human Recombinant Human Heparin-binding EGF-like Growth Factor Heparin-binding EGF HEGFL Diphtheria Toxin Receptor (DTR) |
| Source | <i>Escherichia coli</i> |
| MW | ~9.7 kDa (86 amino acids) |
| Sequence | DLQEADLDLL RVTLSKPKQA LATPNKEEHG KRKKKGKGLG KKRDPCLRKY KDFCIHGECK YVKELRAPSC ICHPGYHGER CHGLSL |
| Gene ID | Q99075 |
| Purity | 97% by SDS and HPLC analyses |
| Biological Activity | Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine BALB/c 3T3 cells is less than 1 ng/ml, corresponding to a specific activity of >1.0 × 10 ⁶ IU/mg. |
| Formulation | Sterile filtered white lyophilized powder. Purified and tested for use in cell culture. |
| Storage/Handling | This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles. |
| Reconstitution | The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum. |