

Recombinant Rat Heparin-binding EGF-like Growth Factor (rRtHB-EGF)

PrimeGene Technical Data Sheet

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| Catalog Number: | 145-08 |
| Source: | <i>Escherichia coli</i> . |
| Molecular Weight: | Approximately 9.7 kDa, a single non-glycosylated polypeptide chain containing 86 amino acids. |
| Quantity: | 10µg/50µg/1000µg |
| AA Sequence: | DLEGTDLDLF KVAFSSKPQA LATPGKEKNG KKKRKGGKGLG KKRDPCLKKY KDYCIHGECR YLKELRIPSC HCLPGYHGQR CHGLTL |
| Purity: | > 95 % by SDS-PAGE 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. |
| Physical Appearance: | Sterile Filtered White lyophilized (freeze-dried) powder. |
| Formulation: | Lyophilized from a 0.2 µm filtered concentrated solution in PBS, 300 mM NaCl, pH 7.4, 5 % trehalose. |
| Endotoxin: | Less than 1 EU/µg of rRtHB-EGF as determined by LAL method. |
| Reconstitution: | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions. |
| Shipping: | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage: | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution. |
| Usage: | This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. |

Rat Heparin-binding EGF-like Growth Factor

Heparin-binding epidermal growth factor (HB-EGF)-like growth factor (EGF) is found in cerebral neurons. Its expression is increased after hypoxic or ischemic injury, which also stimulates neurogenesis. HB-EGF has been implicated as a participant in a variety of normal physiological processes such as blastocyst implantation and wound healing, and in pathological processes such as tumor growth, SMC hyperplasia and atherosclerosis. HB-EGF is an 87 amino acid mitogenic and chemotactic glycoprotein containing an EGF-like domain with six conserved cysteine residues. In addition, it shares about 73 % and 76 % a.a. sequence identity with murine and rat HB-EGF.