

## Recombinant Rat Heparin-binding EGF-like Growth Factor

### Information

<b>Gene ID</b>	25433
<b>Accession #</b>	Q06175
<b>Alternate Names</b>	HBEGF, DT-R
<b>Source</b>	Escherichia coli.
<b>M.Wt</b>	Approximately 9.7 kDa, a single non-glycosylated polypeptide chain containing 86 amino acids.
<b>AA Sequence</b>	DLEGTDLDF KVAFSSKPQA LATPGKEKNG KKKRKKGKGLG KKRDPCLKKY KDYCIHGECR YLKELRIPSC HCLPGYHGQR CHGLTL
<b>Appearance</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 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
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, 300 mM NaCl, pH 7.4, 5 % trehalose.
<b>Reconstitution</b>	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.
<b>Biological Activity</b>	Fully biologically active when compared to standard. The ED 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 IU/mg.
<b>Shipping Condition</b>	Gel pack.
<b>Handling</b>	Centrifuge the vial prior to opening.
<b>Usage</b>	For Research Use Only! Not to be used in humans.

### Components and Storage

Components	10µg	100µg	500µg
Recombinant Rat Heparin-binding EGF-like Growth Factor	10µg	100µg	500µg

Use a manual defrost freezer and avoid repeated freeze-thaw cycles

- 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

## Quality Control

Purity	> 95 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/μg of rRtHB-EGF as determined by LAL method.

## Description

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. Rat HB-EGF shares about 76 % a.a. sequence identity with human HB-EGF.

## Reference

1. Jin K, Mao XO, Sun Y, et al. 2002. J Neurosci. 22:5365-73
2. Higashiyama S, Abraham JA, Miller J, et al. 1991. Science. 251:936-9.

**APExBIO Technology**  
**[www.apexbt.com](http://www.apexbt.com)**

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: [info@apexbt.com](mailto:info@apexbt.com)