Recombinant Rat Hbegf protein

Cat. No. Hbegf-592R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Rat Hbegf protein was expressed in Escherichia coli.
Species	Rat
Source	E.coli
ProteinLength	86
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.
Form	Lyophilized from a 0.2μm filtered concentrated solution in PBS, 300 mM NaCl, pH 7.4, 5 % trehalose.
Bio-activity	Fully biologically active when compared to standard. The ED50 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.
Molecular Mass	Approximately 9.7 kDa, a single non-glycosylated polypeptide chain containing 86

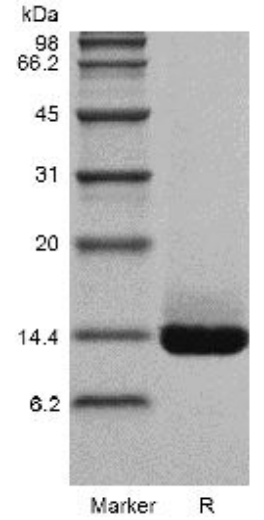
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	amino acids.
AA Sequence	DLEGTDLDLFKVAFSSKPQALATPGKEKNGKKKRKGKGLGKKRDPCLKKYKDYCIH GECRYLKELRIPSCHCLPGYHGQRCHGLTL
Endotoxin	Less than 1 EU/μg of rRtHB-EGF as determined by LAL method.
Purity	>95% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
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 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

Gene Name	Hbegf
Official Symbol	Hbegf
Synonyms	HBEGF, DT-R
Gene ID	25433
mRNA Refseq	NM_012945

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Protein Refseq	NP_037077
UniProt ID	Q06175
SDS-PAGE of Hbegf-592R	

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