

Recombinant Human Heparin-binding EGF-like Growth Factor

#R00141

Size: 10 µg/100 µg/500 µg

Stability & Storage

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

- A minimum of 12 months from date of receipt, when stored at ≤ -20 °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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

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, 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. Human HB-EGF shares about 73% and 76% a.a. sequence identity with murine and rat HB-EGF.

AA Sequence

DLQEADLDLLRVTLSSKPQALATPNKEEHGKRKKKG
KGLGKKRDPCLRKYKDFCIHGECKYVKELRAPSCICH
PGYHGERCHGLSL

Reconstitution

Prior to opening, it is recommended to centrifuge the vial briefly to bring the contents down the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-0.3 mg/ml. If animal-origin-free condition is expected in your product, then sterile distilled water is recommended. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	HBEGF, DT-R
Accession	Q99075
GeneID	1839
Species	Human
Source	Escherichia coli.
Molecular Weight	Approximately 9.7 kDa, a single non-glycosylated polypeptide chain containing 86 amino acids.
Purity	> 97% 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 U/mg.

Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 10 mM PB, 500 mM NaCl, 5% trehalose, pH 7.4.
Endotoxin	Less than 0.1 EU/µg of rHuHB-EGF as determined by LAL method.
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.