

## HB-EGF Protein, Human (HEK293, His)

<b>Cat. No.:</b>	HY-P72487
<b>Synonyms:</b>	Proheparin-binding EGF-like growth factor; HB-EGF; DT-R; DTS; HEGFL
<b>Species:</b>	Human
<b>Source:</b>	HEK293
<b>Accession:</b>	Q99075 (L20-L148)
<b>Gene ID:</b>	1839
<b>Molecular Weight:</b>	Approximately 18 kDa

### PROPERTIES

<b>AA Sequence</b>	<p>L V T G E S L E R L    R R G L A A G T S N    P D P P T V S T D Q    L L P L G G G R D R</p> <p>K V R D L Q E A D L    D L L R V T L S S K    P Q A L A T P N K E    E H G K R K K K G K</p> <p>G L G K K R D P C L    R K Y K D F C I H G    E C K Y V K E L R A    P S C I C H P G Y H</p> <p>G E R C H G L S L</p>
<b>Appearance</b>	Lyophilized powder.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
<b>Endotoxin Level</b>	<1 EU/µg, determined by LAL method.
<b>Reconstitution</b>	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH <sub>2</sub> O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
<b>Storage &amp; Stability</b>	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
<b>Shipping</b>	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

<b>Background</b>	<p>HB-EGF Protein, a versatile growth factor, exerts its regulatory effects through EGFR, ERBB2, and ERBB4. Crucial for cardiac valve formation and normal heart function, HB-EGF plays a pivotal role in promoting smooth muscle cell proliferation and may contribute to macrophage-mediated cellular proliferation. Exhibiting mitogenic properties for fibroblasts while sparing endothelial cells, HB-EGF distinguishes itself by binding to EGF receptor/EGFR with greater affinity than EGF, emerging as a more potent mitogen for smooth muscle cells. Beyond its proliferative role, HB-EGF serves as a diphtheria toxin receptor and engages in interactions with FBLN1. The multifaceted interactions of HB-EGF with EGFR and ERBB4 underscore its central role in cellular regulation and cardiovascular development.</p>
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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