

Recombinant Protein Technical Manual Recombinant Human HBEGF Protein (His Tag)

RPES0548

Product Data:

Product SKU: RPES0548 **Size:** 10μg

Species: Human Cells

Uniprot: Q99075

Protein Information:

Molecular Mass: 15.1 kDa

AP Molecular Mass: 18 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Diphtheria toxin receptor; DTR;HEGFL; heparin-binding EGF-like growth factor;

DTS; DTSF; heparin-binding epidermal growth factor; proheparin-binding EGF-like

growth factor; HB-EGF; pro HB-EGF

Immunogen Information:

Sequence: Leu20-Leu148

Background:

Heparin-binding EGF-like growth factor (HB-EGF) is a 126 kDa member of the epidermal growth factor (EGF) family. It possesses an EGF-like domain, and a heparin-binding motif. Mature HB-EGF is a soluble peptide that arises from proteolytic processing of the transmembrane form. Human HB-EGF shows 76% and 73% aa sequence identity with rat and mouse HB-EGF, respectively. It is required for normal cardiac valve formation and normal heart function, promotes smooth muscle cell proliferation. It may be involved in macrophage-mediated cellular proliferation; it is mitogenic for fibroblasts, but not endothelial cells. HB-EGF classified as a group 2 ErbB ligand based on its ability to activate both the EGF/ErbB1 and ErbB4 receptors. Activity associated with ErbB4 binding appears to be limited to non-mitogenic actions, while EGFR binding induces both mitogenic and non-mitogenic activity.