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Rabbit Anti-DTSF/HB-EGF/AF350 Conjugated antibody

SL23252R-AF350

Product Name	Anti-DTSF/HB-EGF/AF350
Chinese Name	AF350 标记的肝素结合性表皮生长因子抗体
Alias	HB EGF; Diphtheria toxin receptor; DT R; DT-R; DTR; DTS; DTSF; HB-EGF; HBEGF; HBEGF_HUMAN; HEGFL; heparin binding EGF like growth factor; Heparin binding epidermal growth factor; Heparin binding epidermal growth factor like growth factor; Heparin-binding EGF-like growth factor; Proheparin binding EGF like growth factor.
Research Area	Tumour Cardiovascular immunology Signal transduction Growth factors and hormones vascular endothelial cell
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human(predicted:Mouse,Rat,Pig,Cow,Sheep)
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	21kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human DTSF/HB-EGF
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 1M PBS, pH 7.4.
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** Heparin-binding epidermal growth factor-like growth factor (HB-EGF) is a

22kDa O-glycosylated protein that is a potent mitogen and chemoattractant for vascular smooth muscle cells, fibroblasts and epithelial cells but not endothelial cells. The natural protein has an apparent molecular mass of 19-23 kDa and exists in multiple forms as a result of heterogeneous O-glycosylation and/or Nterminal truncation. HB-EGF is synthesized as a membrane-anchored precursor(proHB-EGF) that is proteolytically cleaved to release the soluble mature growth factor. The two forms are active as juxtacrine and paracrine/autocrine growth factors respectively.HB-EGF activates two EGF receptor subtypes, HER1/ErbB1 and HER4 and binds to heparan sulfate proteoglycan.

Function:
Growth factor that mediates its effects via EGFR, ERBB2 and ERBB4. Required for normal cardiac valve formation and normal heart function. Promotes smooth muscle cell proliferation. May be involved in macrophage-mediated cellular proliferation. It is mitogenic for fibroblasts, but not endothelial cells. It is able to bind EGF receptor/EGFR with higher affinity than EGF itself and is a far more potent mitogen for smooth muscle cells than EGF. Also acts as a diphtheria toxin receptor.

Subunit:
Interacts with FBLN1. Interacts with EGFR and ERBB4.

Subcellular Location:
Heparin-binding EGF-like growth factor: Secreted, extracellular space. Note=Mature HB-EGF is released into the extracellular space and probably binds to a receptor.
Proheparin-binding EGF-like growth factor: Cell membrane; Single-pass type I membrane protein.

Post-translational modifications:
Several N-termini have been identified by direct sequencing. The forms with N-termini 63, 73 and 74 have been tested and found to be biologically active. O-glycosylated with core 1 or possibly core 8 glycans. Thr-47 is a minor glycosylation site compared to Thr-44.

Similarity:
Contains 1 EGF-like domain.

Database links:

Entrez Gene: 1839 Human

Omim: 126150 Human

SwissProt: Q99075 Human

Unigene: 799 Human

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.