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HBEGF Rabbit pAb

Catalog # AP99782

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q99075
Other Accession	Q99075
Reactivity	Human
Predicted	Rat, Pig, Mouse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23067
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DTSF/HB-EGF
Epitope Specificity	20-62/208
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 EGF-like domain.
SUBUNIT	Interacts with FBLN1. Interacts with EGFR and ERBB4.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	1839
Other Names	DTR; DTS; DTSF; HEGFL; HBEGF_HUMAN; HBEGF; heparin binding EGF like growth factor; diphtheria toxin receptor (heparin-binding epidermal growth factor-like growth factor); heparin-binding EGF-like growth factor; Diphtheria toxin receptor (heparin-binding EGF-like growth factor); heparin-binding epidermal growth factor

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	HBEGF
Synonyms	DTR, DTS, HEGFL
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.
Cellular 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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.