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HBEGF Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14829c

Product Information

Application	WB, E
Primary Accession	Q99075
Other Accession	NP_001936.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34551
Calculated MW	23067
Antigen Region	68-96

Additional Information

Gene ID	1839
Other Names	Proheparin-binding EGF-like growth factor, Heparin-binding EGF-like growth factor, HB-EGF, HBEGF, Diphtheria toxin receptor, DT-R, HBEGF, DTR, DTS, HEGFL
Target/Specificity	This HBEGF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 68-96 amino acids from the Central region of human HBEGF.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HBEGF Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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

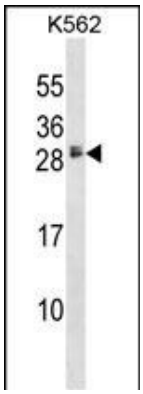
Background

HBEGF may be involved in macrophage-mediated cellular proliferation. It is mitogenic for fibroblasts and smooth muscle but not endothelial cells. It is able to bind EGF receptors 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.

References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Rahman, F.B., et al. Lab. Invest. 90(7):1033-1048(2010)
Hamaoka, M., et al. J. Biochem. 148(1):55-69(2010)
Smirnova, I.S., et al. Tsitologiia 52(5):357-363(2010)
Yokoyama, K., et al. Nephron Clin Pract 115 (4), C237-C243 (2010) :

Images



HBEGF Antibody (Center) (Cat. #AP14829c) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the HBEGF antibody detected the HBEGF protein (arrow).