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## Human HBEGF Antibody Pair Set

Catalog No.E-KAB-0428ApplicationsELISASynonymsDTR;DTS;DTSF;Diphtheria Toxin Receptor;Diphtheria toxin receptor;HB-<br/>EGF;HEGFL;Proheparin-binding EGF-like growth factor

#### **Kit components & Storage**

Title	Specifications	Storage
Human HBEGF Capture Antibody	1 vial, 100 µ g	Store at $-20^{\circ}$ C for one year.
		Avoid freeze/thaw cycles.
Human HBEGF Detection Antibody	1 vial, 50 μL	Store at $-20^{\circ}$ C for one year.
(Biotin)		Avoid freeze/thaw cycles.

Note: Centrifuge before opening to ensure complete recovery of vial contents.

#### **Product Information**

Items		Characteristic (E-KAB-0428)	
		Human HBEGF Capture Antibody	Human HBEGF Detection Antibody (Biotin)
Immunogen	Immunogen	Recombinant Human HBEGF protien	Recombinant Human HBEGF protien
Information	Swissprot	Q99075	
Product details Reactivity		Human	Human
	Host	Goat	Goat
	Conjugation	Unconjugated	Biotin
	Concentration	0.5 mg/mL	/
	Buffer	PBS with 0.04% Proclin 300; 50%	PBS with 0.04% Proclin 300; 1%
		glycerol; pH 7.5	protective protein; 50% glycerol; pH
			7.5
	Purify	Antigen Affinity	Antigen Affinity
Specificity		Detects Human HBEGF in ELISAs.	

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### Applications

Human HBEGF Sandwich ELISA Assay:

	Recommended	Reagent	Images
	Concentration/Dilution		
ELISA	0.5-4 μg/mL	Human HBEGF Capture	
Capture		Antibody	10
			optical Density
ELISA	1:1000-1:10000	Human HBEGF Detection	O O.1
Detection		Antibody (Biotin)	-
			0. 01 0. 1 1 10 100
			Human HBEGF concentration(ng/mL)

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

### Background

Heparin-binding EGF-like growth factor (HB-EGF) is a 12-16 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 thatarises from proteolytic processing of the transmembrane form. Human HB -EGF shows 76% and 73% aasequence identity with rat and mouse HB-EGF , respectively. It is required for normal cardiac valve formationand 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 agroup 2 ErbB ligand based on its ability to activate both the EGF/ErbB1 and ErbB4 receptors. Activityassociated with ErbB4 binding appears to be limited to non -mitogenic actions , while EGFR binding inducesboth mitogenic and non-mitogenic activity.