

Human HBEGF Antibody Pair Set

Catalog No.	E-KAB-0428	Applications	ELISA
Synonyms	DTR;DTS;DTSF;Diphtheria Toxin Receptor;Diphtheria toxin receptor;HB-EGF;HEGFL;Proheparin-binding EGF-like growth factor		

Kit components & Storage

Title	Specifications	Storage
Human HBEGF Capture Antibody	1 vial, 100 µg	Store at -20℃ for one year. Avoid freeze/thaw cycles.
Human HBEGF Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20℃ for one year. Avoid freeze/thaw cycles.

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

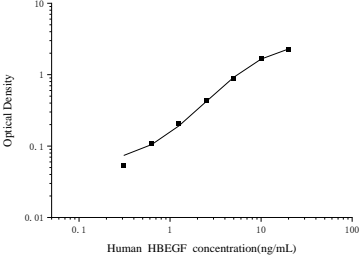
Product Information

Items		Characteristic (E-KAB-0428)	
		Human HBEGF Capture Antibody	Human HBEGF Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human HBEGF protien	Recombinant Human HBEGF protien
	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% glycerol; pH 7.5	PBS with 0.04% Proclin 300; 1% 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 Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4 µg/mL	Human HBEGF Capture Antibody	 <table><caption>Approximate data points from the standard curve</caption><thead><tr><th>Human HBEGF concentration (ng/mL)</th><th>Optical Density</th></tr></thead><tbody><tr><td>0.1</td><td>0.05</td></tr><tr><td>0.5</td><td>0.1</td></tr><tr><td>1</td><td>0.2</td></tr><tr><td>5</td><td>1.0</td></tr><tr><td>10</td><td>2.0</td></tr><tr><td>50</td><td>3.5</td></tr><tr><td>100</td><td>4.0</td></tr></tbody></table>	Human HBEGF concentration (ng/mL)	Optical Density	0.1	0.05	0.5	0.1	1	0.2	5	1.0	10	2.0	50	3.5	100	4.0
Human HBEGF concentration (ng/mL)	Optical Density																		
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ELISA Detection	1:1000-1:10000	Human HBEGF Detection Antibody (Biotin)																	

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 that arises from proteolytic processing of the transmembrane form. Human HB-EGF shows 76% and 73% amino acid 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 is 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.

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