

## Human ES Antibody Pair Set

<b>Catalog No.</b>	E-KAB-0710	<b>Applications</b>	ELISA
<b>Synonyms</b>	COL18A1;collagen alpha-1(XVIII) chain;collagen;type XVIII;alpha 1;Endostatin;FLJ27325;FLJ34914;human type XVIII collagen 10 endostatin;KNO		

### Kit components & Storage

Title	Specifications	Storage
Human ES Capture Antibody	1 vial, 100 µg	Store at -20°C. Avoid freeze / thaw cycles.
Human ES Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20°C. Avoid freeze / thaw cycles.

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

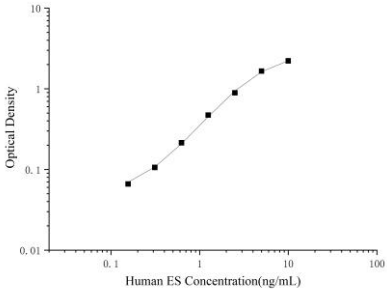
### Product Information

Items		Characteristic (E-KAB-0710)	
		Human ES Capture Antibody	Human ES Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human ES protein	Recombinant Human ES protein
	Swissprot	P39060	
Product details	Reactivity	Human	Human
	Host	Goat	Goat
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Affinity purification	Affinity purification
Specificity	Detects Human ES in ELISAs.		

### For Research Use Only

## Applications

### Human ES Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4ug/mL	Human ES Capture Antibody	 <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human ES Concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>0.1</td> <td>0.05</td> </tr> <tr> <td>0.2</td> <td>0.1</td> </tr> <tr> <td>0.5</td> <td>0.2</td> </tr> <tr> <td>1</td> <td>0.4</td> </tr> <tr> <td>2</td> <td>0.8</td> </tr> <tr> <td>5</td> <td>1.5</td> </tr> <tr> <td>10</td> <td>2.5</td> </tr> </tbody> </table>	Human ES Concentration (ng/mL)	Optical Density	0.1	0.05	0.2	0.1	0.5	0.2	1	0.4	2	0.8	5	1.5	10	2.5
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ELISA Detection	1:1000-1:10000	Human ES Detection Antibody (Biotin)																	

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

## Background

Endostatin is a C-terminal proteolytic fragment of collagen XVIII  $\alpha 1$  (Col 18) that is localized in the vascular basement membrane of almost all epithelia and endothelia. Endostatin is produced from catalytic cleavage from MMPs, cathepsin L, and S. It is detected in circulation at a physiologic level of 20 to 50 ng/ml in serum. Endostatin interacts with multiple molecules including heparin, heparan sulfate, chondroitin sulfate, dermatan sulfate, thrombospondin-1, SPARC, collagens (I, IV, and VI), the amyloid peptide A $\beta$  (1-42), transglutaminase-2, and among others. Endostatins derived from collagens XV and XVIII differ in structure and binding properties, tissue distribution, and anti-angiogenic activity. Endostatin is an endogenous angiostatic factor that induces apoptosis in endothelial cells and inhibits endothelial cell migration in vitro.