

Human TGF-β1 Antibody Pair Set

Catalog No.	E-KAB-0066	Applications	ELISA
Synonyms	TGFB1, CED, DPD1, LAP, TGFB, TGFbeta, transforming growth factor beta 1		

Kit components & Storage

Title	Specifications	Storage
Human TGF-β1 Capture Antibody	1 vial, 100 μg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Human TGF-β1 Detection Antibody (Biotin)	1 vial, 50 μL	Store at -20°C for one year. Avoid freeze / thaw cycles.

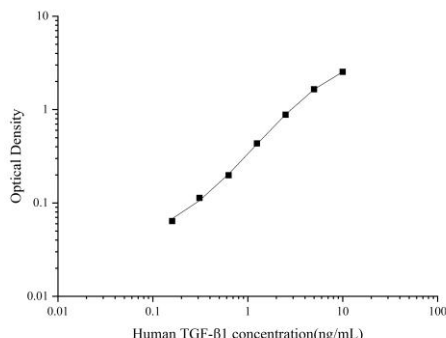
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0066)	
		Human TGF-β1 Capture Antibody	Human TGF-β1 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human TGF-β1 protein	Recombinant Human TGF-β1 protein
	Swissprot	P01137	
Product details	Reactivity	Human	Human
	Host	Mouse	Chicken
	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	Protein A or G	Antigen Affinity
	Specificity	Detects Human TGF-β1 in ELISAs.	

Applications

Human TGF-β1 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4μg/mL	Human TGF-β1 Capture Antibody	 <p>The graph displays a standard curve for the Human TGF-β1 Sandwich ELISA Assay. The x-axis represents Human TGF-β1 concentration in ng/mL, ranging from 0.01 to 100 on a logarithmic scale. The y-axis represents Optical Density, ranging from 0.01 to 10 on a logarithmic scale. The data points form a straight line, indicating a linear relationship between the concentration of the antigen and the optical density reading.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human TGF-β1 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>3.0</td> </tr> </tbody> </table>	Human TGF-β1 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	3.0
Human TGF-β1 concentration (ng/mL)	Optical Density																		
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ELISA Detection	1:1000-1:10000	Human TGF-β1 Detection Antibody (Biotin)																	

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

Background

This gene encodes a member of the transforming growth factor beta (TGFB) family of cytokines, which are multifunctional peptides that regulate proliferation, differentiation, adhesion, migration, and other functions in many cell types. Many cells have TGFB receptors, and the protein positively and negatively regulates many other growth factors. The secreted protein is cleaved into a latency-associated peptide (LAP) and a mature TGFB1 peptide, and is found in either a latent form composed of a TGFB1 homodimer, a LAP homodimer, and a latent TGFB1-binding protein, or in an active form composed of a TGFB1 homodimer. The mature peptide may also form heterodimers with other TGFB family members. This gene is frequently upregulated in tumor cells, and mutations in this gene result in Camurati-Engelmann disease.