

Rat TGF-β1 Antibody Pair Set

Catalog No.	E-KAB-0111	Applications	ELISA
Synonyms	TGFB1, CED, DPD1, LAP, TGFB, TGFbeta, transforming growth factor beta 1		

Kit components & Storage

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

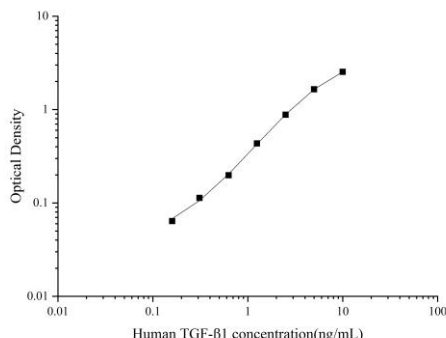
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0111)	
		Rat TGF-β1 Capture Antibody	Rat TGF-β1 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Rat TGF-β1 protein	Recombinant Rat TGF-β1 protein
	Swissprot	P17246	
Product details	Reactivity	Rat	Rat
	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 Rat TGF-β1 in ELISAs.	

Applications

Rat TGF-β1 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images
ELISA Capture	0.5-4μg/mL	Rat TGF-β1 Capture Antibody	 <p>The graph is a log-log plot. The y-axis is labeled 'Optical Density' and ranges from 0.01 to 10. The x-axis is labeled 'Human TGF-β1 concentration(ng/mL)' and ranges from 0.01 to 100. Six data points are plotted, showing a clear upward trend. The points are approximately at (0.1, 0.05), (0.2, 0.1), (0.5, 0.2), (1, 0.4), (2, 0.7), and (5, 1.2).</p>
ELISA Detection	1:1000-1:10000	Rat 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.