

Human TG Antibody Pair Set

Catalog No. E-KAB-0125

Applications

ELISA

Synonyms AITD3, TGN

Kit components & Storage

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

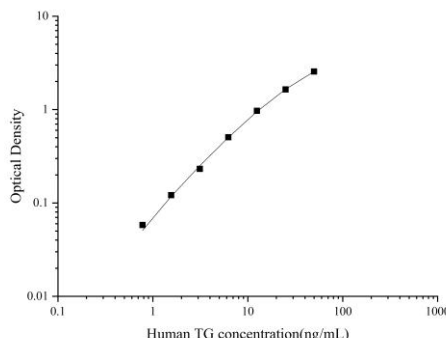
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0125)	
		Human TG Capture Antibody	Human TG Detection Antibody (Biotin)
Immunogen Information	Immunogen	Native Protein	Native Protein
	Swissprot	P01266	
Product details	Reactivity	Human	Human
	Host	Rabbit	Rabbit
	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	Antigen Affinity	Antigen Affinity
	Specificity	Detects Human TG in ELISAs.	

Applications

Human TG Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4μg/mL	Human TG Capture Antibody	 <p>The graph displays a standard curve for the Human TG Sandwich ELISA Assay. The x-axis represents Human TG concentration in ng/mL, ranging from 0.1 to 1000 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 strong positive correlation between the concentration of Human TG and the resulting optical density.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human TG concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>0.5</td> <td>0.05</td> </tr> <tr> <td>1</td> <td>0.1</td> </tr> <tr> <td>2</td> <td>0.2</td> </tr> <tr> <td>5</td> <td>0.5</td> </tr> <tr> <td>10</td> <td>1.0</td> </tr> <tr> <td>20</td> <td>2.0</td> </tr> <tr> <td>50</td> <td>5.0</td> </tr> </tbody> </table>	Human TG concentration (ng/mL)	Optical Density	0.5	0.05	1	0.1	2	0.2	5	0.5	10	1.0	20	2.0	50	5.0
Human TG concentration (ng/mL)	Optical Density																		
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50	5.0																		
ELISA Detection	1:1000-1:10000	Human TG Detection Antibody (Biotin)																	

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

Background

Thyroglobulin (Tg) is a glycoprotein homodimer produced predominantly by the thyroid gland. It acts as a substrate for the synthesis of thyroxine and triiodothyronine as well as the storage of the inactive forms of thyroid hormone and iodine. Thyroglobulin is secreted from the endoplasmic reticulum to its site of iodination, and subsequent thyroxine biosynthesis, in the follicular lumen. Mutations in this gene cause thyroid dysmorphogenesis, manifested as goiter, and are associated with moderate to severe congenital hypothyroidism. Polymorphisms in this gene are associated with susceptibility to autoimmune thyroid diseases (AITD) such as Graves disease and Hashimoto thyroiditis.