

## Human TSH Antibody Pair Set

**Catalog No.** E-KAB-0140

**Applications**

ELISA

**Synonyms** Thyrotropin

### Kit components & Storage

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

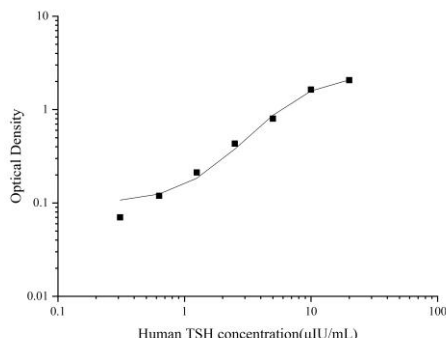
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Product Information

Items		Characteristic (E-KAB-0140)	
		Human TSH Capture Antibody	Human TSH Detection Antibody (Biotin)
Immunogen Information	Immunogen	Native Protein	Native Protein
	Swissprot	P01222	
Product details	Reactivity	Human	Human
	Host	Mouse	Mouse
	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	Protein A
	Specificity	Detects Human TSH in ELISAs.	

## Applications

### Human TSH Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																				
ELISA Capture	0.5-4µg/mL	Human TSH Capture Antibody	 <p>The graph displays a standard curve for the Human TSH Sandwich ELISA Assay. The x-axis represents Human TSH concentration in µIU/mL on a logarithmic scale from 0.1 to 100. The y-axis represents Optical Density on a logarithmic scale from 0.01 to 10. The data points show a clear upward trend, indicating that as the concentration of Human TSH increases, the optical density also increases.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human TSH concentration (µIU/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> <tr> <td>20</td> <td>4.0</td> </tr> <tr> <td>50</td> <td>6.0</td> </tr> </tbody> </table>	Human TSH concentration (µIU/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	20	4.0	50	6.0
Human TSH concentration (µIU/mL)	Optical Density																						
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ELISA Detection	1:1000-1:10000	Human TSH Detection Antibody (Biotin)																					

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

## Background

The four human glycoprotein hormones chorionic gonadotropin (CG), luteinizing hormone (LH), follicle stimulating hormone (FSH), and thyroid stimulating hormone (TSH) are dimers consisting of alpha and beta subunits that are associated noncovalently. The alpha subunits of these hormones are identical, however, their beta chains are unique and confer biological specificity. Thyroid stimulating hormone functions in the control of thyroid structure and metabolism. The protein encoded by this gene is the beta subunit of thyroid stimulating hormone. Mutations in this gene are associated with congenital central and secondary hypothyroidism and Hashimoto's thyroiditis. Alternative splicing of this gene results in multiple transcript variants.