

Human INS Antibody Pair Set

Catalog No.	E-KAB-0049	Applications	ELISA
Synonyms	IDDM2;ILPR;IRDN;MODY10		

Kit components & Storage

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

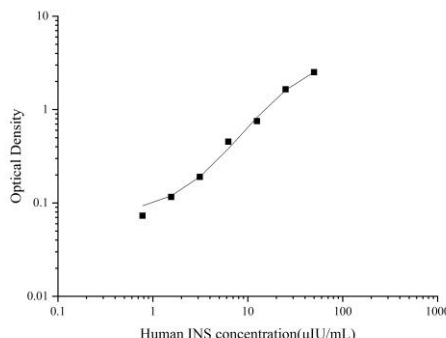
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0049)	
		Human INS Capture Antibody	Human INS Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human INS protein	Recombinant Human INS protein
	Swissprot	P01308	
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 INS in ELISAs.	

Applications

Human INS Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4μg/mL	Human INS Capture Antibody	 <p>The graph displays a standard curve for the Human INS Sandwich ELISA Assay. The x-axis represents Human INS concentration in μIU/mL on a logarithmic scale from 0.1 to 1000. 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 INS increases, the optical density also increases.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human INS concentration (μIU/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>0.5</td> <td>0.08</td> </tr> <tr> <td>1</td> <td>0.12</td> </tr> <tr> <td>2</td> <td>0.2</td> </tr> <tr> <td>5</td> <td>0.4</td> </tr> <tr> <td>10</td> <td>0.8</td> </tr> <tr> <td>20</td> <td>1.5</td> </tr> <tr> <td>50</td> <td>3.0</td> </tr> </tbody> </table>	Human INS concentration (μIU/mL)	Optical Density	0.5	0.08	1	0.12	2	0.2	5	0.4	10	0.8	20	1.5	50	3.0
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ELISA Detection	1:1000-1:10000	Human INS Detection Antibody (Biotin)																	

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

Background

Insulin is a peptide hormone, produced by beta cells of the pancreas, and is central to regulating carbohydrate and fat metabolism in the body. It participates in glucose utilization, protein synthesis and in the formation and storage of neutral lipids. Insulin is synthesized as a precursor molecule, proinsulin, which is processed prior to secretion. A- and B-peptides are joined together by a disulfide bond to form insulin, while the central portion of the precursor molecule is cleaved and released as the C-peptide. Defects in insulin result in type 1 diabetes mellitus. Insulin may also exist as a 36 kDa form corresponding to the hexameric insulin form.