

## Human ApoB Antibody Pair Set

<b>Catalog No.</b>	E-KAB-0012	<b>Applications</b>	ELISA
<b>Synonyms</b>	APOB, FLDB, LDLCQ4, apoB-100, apoB-48, apolipoprotein B		

### Kit components & Storage

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

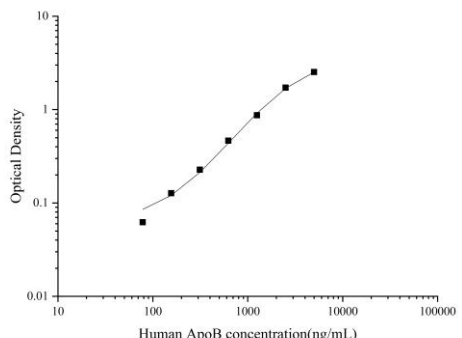
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Product Information

Items		Characteristic (E-KAB-0012)	
		Human ApoB Capture Antibody	Human ApoB Detection Antibody (Biotin)
Immunogen Information	Immunogen	Native Protein	Native Protein
	Swissprot	P04114(ApoB100)	
Product details	Reactivity	Human	Human
	Host	Goat	Goat
	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 ApoB in ELISAs.	

## Applications

### Human ApoB Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4μg/mL	Human ApoB 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 ApoB concentration(ng/mL)' and ranges from 10 to 100000. The data points form a straight line with a positive slope, indicating a linear relationship between the concentration of Human ApoB and the optical density.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human ApoB concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>100</td> <td>0.05</td> </tr> <tr> <td>200</td> <td>0.1</td> </tr> <tr> <td>500</td> <td>0.2</td> </tr> <tr> <td>1000</td> <td>0.4</td> </tr> <tr> <td>2000</td> <td>0.8</td> </tr> <tr> <td>5000</td> <td>1.5</td> </tr> <tr> <td>10000</td> <td>3.0</td> </tr> </tbody> </table>	Human ApoB concentration (ng/mL)	Optical Density	100	0.05	200	0.1	500	0.2	1000	0.4	2000	0.8	5000	1.5	10000	3.0
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ELISA Detection	1:1000-1:10000	Human ApoB Detection Antibody (Biotin)																	

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

## Background

This gene product is the main apolipoprotein of chylomicrons and low density lipoproteins. It occurs in plasma as two main isoforms, apoB-48 and apoB-100: the former is synthesized exclusively in the gut and the latter in the liver. The intestinal and the hepatic forms of apoB are encoded by a single gene from a single, very long mRNA. The two isoforms share a common N-terminal sequence. The shorter apoB-48 protein is produced after RNA editing of the apoB-100 transcript at residue 2180 (CAA->UAA), resulting in the creation of a stop codon, and early translation termination. Mutations in this gene or its regulatory region cause hypobetalipoproteinemia, normotriglyceridemic hypobetalipoproteinemia, and hypercholesterolemia due to ligand-defective apoB, diseases affecting plasma cholesterol and apoB levels.