

Human RBP4 Antibody Pair Set

Catalog No. E-KAB-0114

Applications

ELISA

Synonyms RBP-4, PRBP

Kit components & Storage

Title	Specifications	Storage
Human RBP4 Capture Antibody	1 vial, 100 μg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Human RBP4 Detection Antibody (Biotin)	1 vial, 50 μL	Store at -20°C for one year. Avoid freeze / thaw cycles.

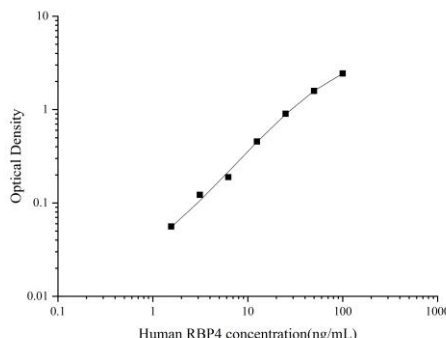
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0114)	
		Human RBP4 Capture Antibody	Human RBP4 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Human RBP4 protein	Recombinant Human RBP4 protein
	Swissprot	P02753	
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 or G	Protein A or G
	Specificity	Detects Human RBP4 in ELISAs.	

Applications

Human RBP4 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4µg/mL	Human RBP4 Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Human RBP4 concentration (ng/mL). The x-axis ranges from 0.1 to 1000 ng/mL, and the y-axis ranges from 0.01 to 10. The data points form a straight line, indicating a linear relationship between the log of concentration and the log of optical density.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Human RBP4 concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr><td>1</td><td>0.05</td></tr> <tr><td>2</td><td>0.1</td></tr> <tr><td>5</td><td>0.2</td></tr> <tr><td>10</td><td>0.4</td></tr> <tr><td>20</td><td>0.8</td></tr> <tr><td>50</td><td>1.5</td></tr> <tr><td>100</td><td>3.0</td></tr> </tbody> </table>	Human RBP4 concentration (ng/mL)	Optical Density	1	0.05	2	0.1	5	0.2	10	0.4	20	0.8	50	1.5	100	3.0
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ELISA Detection	1:1000-1:10000	Human RBP4 Detection Antibody (Biotin)																	

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

Background

RBP4 (retinol-binding protein 4) is a carrier protein that transports vitamin A (retinol) from the liver to the peripheral tissues. Synthesized primarily by hepatocytes and adipocytes as a 21 kDa non-glycosylated protein, RBP4 is secreted into the circulation as a retinol-RBP4 complex. In plasma the RBP4-retinol complex is bound to transthyretin (TTR), which prevents prevent kidney filtration. Two truncated forms of RBP4, RBP4-L (truncated at Leu-183) and RBP4-LL (truncated at Leu-182 and Leu-183), exist by proteolytic process. RBP4-L and RBP4-LL, which do not bind TTR, are normally excreted into the urine but accumulate in the serum during renal failure. Urinary RBP4 has been reported as marker for glomerular disease. RBP4 also was identified as an adipokine that elevated in some insulin-resistant states. Measurement of serum RBP4 could be used to assess the risk of insulin resistance, type 2 diabetes, obesity, and cardiovascular disease.

(18752671,16034410)