

Rat REN Antibody Pair Set

Catalog No.	E-KAB-0688	Applications	ELISA
Synonyms	Angiotensinogenase;FLJ10761;HNFJ2;Prorenin;REN;renin precursor;renal;Renin		

Kit components & Storage

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

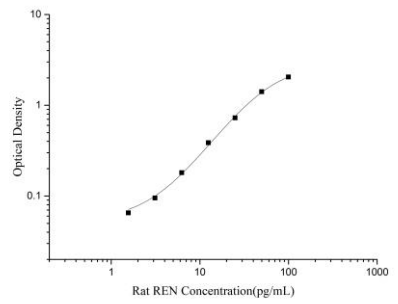
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0688)	
		Rat REN Capture Antibody	Rat REN Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Rat REN protein	Recombinant Rat REN protein
	Swissprot	P08424	
Product details	Reactivity	Rat	Rat
	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 G	Protein G
	Specificity	Detects Rat REN in ELISAs.	

Applications

Rat REN Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4ug/mL	Rat REN Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Rat REN Concentration (pg/mL). The x-axis ranges from 1 to 1000 pg/mL, and the y-axis ranges from 0.1 to 10. The data points form a smooth, upward-sloping curve, indicating a positive correlation between concentration and optical density.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Rat REN Concentration (pg/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>2.5</td> </tr> </tbody> </table>	Rat REN Concentration (pg/mL)	Optical Density	1	0.05	2	0.1	5	0.2	10	0.4	20	0.8	50	1.5	100	2.5
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ELISA Detection	1:1000-1:10000	Rat REN Detection Antibody (Biotin)																	

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

Background

Renin is a secreted endopeptidase that plays a crucial role in the regulation of blood pressure and salt balance through the cleavage of angiotensinogen, which is the only known physiological substrate of Renin. The 406 aa precursor includes a signal peptide (aa 1 - 23), a propeptide (aa 24 - 66), and a mature chain (aa 67 - 406). It is an aspartyl protease that cleaves angiotensinogen to form angiotensin I. Renal Renin (Renin-1) is synthesized as a 381 aa proform (aa 22 - 402). In the kidney, prorenin is proteolytically cleaved after Thr71 to generate a mature enzyme.