

## Rat KIM-1 Antibody Pair Set

<b>Catalog No.</b>	E-KAB-0107	<b>Applications</b>	ELISA
<b>Synonyms</b>	HAVCR1, HAVCR, HAVCR-1, KIM-1, KIM1, TIM, TIM-1, TIM1, TIMD-1, TIMD1		

### Kit components & Storage

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

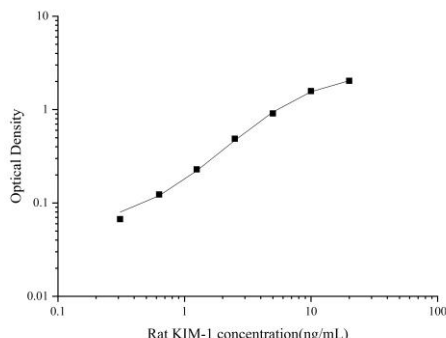
**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Product Information

Items		Characteristic (E-KAB-0107)	
		Rat KIM-1 Capture Antibody	Rat KIM-1 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Rat KIM-1 protein	Recombinant Rat KIM-1 protein
	Swissprot	O54947	
Product details	Reactivity	Rat	Rat
	Host	Mouse	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 or G	Antigen Affinity
	Specificity	Detects Rat KIM-1 in ELISAs.	

## Applications

### Rat KIM-1 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4µg/mL	Rat KIM-1 Capture Antibody	 <p>The graph displays a standard curve for the Rat KIM-1 Sandwich ELISA Assay. The x-axis represents Rat KIM-1 concentration in ng/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 Rat KIM-1 increases, the optical density also increases.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Rat KIM-1 concentration (ng/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>0.2</td> <td>0.05</td> </tr> <tr> <td>0.5</td> <td>0.1</td> </tr> <tr> <td>1</td> <td>0.2</td> </tr> <tr> <td>2</td> <td>0.4</td> </tr> <tr> <td>5</td> <td>0.8</td> </tr> <tr> <td>10</td> <td>1.5</td> </tr> <tr> <td>20</td> <td>2.5</td> </tr> </tbody> </table>	Rat KIM-1 concentration (ng/mL)	Optical Density	0.2	0.05	0.5	0.1	1	0.2	2	0.4	5	0.8	10	1.5	20	2.5
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ELISA Detection	1:1000-1:10000	Rat KIM-1 Detection Antibody (Biotin)																	

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

## Background

KIM-1, also known as Kidney Injury Molecule 1 and Hepatitis A virus cellular receptor 1 homolog (HAVcr-1), or T-cell immunoglobulin and mucin domain 1 (TIM-1) is a 283 amino acid protein that contains an N-terminal immunoglobulin-like domain and is encoded by the HAVCR1 gene. KIM-1 is a single-pass type 1 membrane protein has been identified as a receptor for hepatitis A virus. The TIM gene family participates in host immune response. Urinary KIM-1 levels are elevated in nephropathy and is thought to be a biomarker for renal damage.