

## Rat ICAM-1/CD54 Antibody Pair Set

<b>Catalog No.</b>	E-KAB-0099	<b>Applications</b>	ELISA
<b>Synonyms</b>	ICAM1, BB2, CD54, P3.58, intercellular adhesion molecule 1		

### Kit components & Storage

Title	Specifications	Storage
Rat ICAM-1/CD54 Capture Antibody	1 vial, 100 µg	Store at -20℃ for one year. Avoid freeze / thaw cycles.
Rat ICAM-1/CD54 Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20℃ for one year. Avoid freeze / thaw cycles.

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

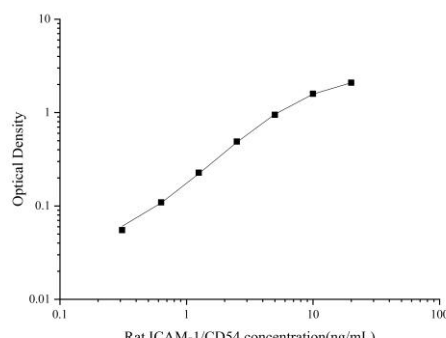
### Product Information

Items		Characteristic (E-KAB-0099)	
		Rat ICAM-1/CD54 Capture Antibody	Rat ICAM-1/CD54 Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Rat ICAM-1/CD54 protein	Recombinant Rat ICAM-1/CD54 protein
	Swissprot	Q00238	
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 ICAM-1/CD54 in ELISAs.	

### For Research Use Only

## Applications

Rat ICAM-1/CD54 Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images																
ELISA Capture	0.5-4μg/mL	Rat ICAM-1/CD54 Capture Antibody	 <table><caption>Approximate data points from the standard curve</caption><thead><tr><th>Rat ICAM-1/CD54 concentration (ng/mL)</th><th>Optical Density</th></tr></thead><tbody><tr><td>0.1</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>5</td><td>0.5</td></tr><tr><td>10</td><td>1.0</td></tr><tr><td>20</td><td>1.5</td></tr><tr><td>50</td><td>2.0</td></tr></tbody></table>	Rat ICAM-1/CD54 concentration (ng/mL)	Optical Density	0.1	0.05	0.5	0.1	1	0.2	5	0.5	10	1.0	20	1.5	50	2.0
Rat ICAM-1/CD54 concentration (ng/mL)	Optical Density																		
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50	2.0																		
ELISA Detection	1:1000-1:10000	Rat ICAM-1/CD54 Detection Antibody (Biotin)																	

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

## Background

ICAM-1 (intercellular adhesion molecule-1), also known as CD54, is a transmembrane protein that is upregulated on endothelial and epithelial cells at sites of inflammation. It mediates the vascular adhesion and paracellular migration of leukocytes expressing activated LFA-1 (CD11a/CD18) and Mac-1 (CD11b/CD18). It also binds several non-integrin ligands including CD43/Sialophorin, Fibrinogen, Hyaluronan, rhinoviruses, and Plasmodium falciparum-infected erythrocytes. Soluble ICAM-1 promotes angiogenesis and serves as an indicator of vascular endothelial cell activation or damage. Elevated levels of soluble ICAM-1 are associated with cardiovascular disease, type 2 diabetes, organ transplant dysfunction, oxidant stress, increased abdominal fat mass, hypertension, liver disease, certain malignancies, and cerebral malaria.

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