



Mouse Kidney injury molecule 1, Kim-1 ELISA Kit

Product Code	CSB-E08809m
Abbreviation	HAVCR1
Target Name	hepatitis A virus cellular receptor 1
Uniprot No.	Q5QNS5
Alias	HAVCR, HAVCR-1, KIM-1, KIM1, TIM-1, TIM1, TIMD1, T cell immunoglobulin domain and mucin domain protein 1 kidney injury molecule 1
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma, tissue homogenates, urine
Detection Range	0.9 ng/mL-60 ng/mL
Sensitivity	0.225 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Microbiology
Gene Names	Havcr1
Tag Info	quantitative
Protein Description	Sandwich

Description

CUSABIO's Kim-1 mouse ELISA kit is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of mouse Kim-1 in serum, plasma, tissue homogenates, or urine. This assay uses an antibody specific for mouse Kim-1 coated on a 96-well plate. Kim-1 present in a sample is bound to the wells by the immobilized antibody after adding the sample into the wells. Biotinylated Kim-1 antibody is added to the wells, forming an antibody-analyte-antibody complex. HRP-conjugated avidin is pipetted to the wells and binds to the complex. A TMB substrate solution is added to the wells and color develops in proportion to the amount of Kim-1 bound. The addition of Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm using a microplate reader.

Kim-1 (HAVCR1) is most highly upregulated in the proximal tubular epithelium in acute and chronic kidney injury. Kim-1 functions as a phosphatidylserine receptor that recognizes and internalizes apoptotic cells and also acts as a scavenger receptor that mediates the uptake of modified low-density lipoprotein and necrotic-cell debris. A large amount of Kim-1 protein is also released into



the urine, making it a useful urinary biomarker for kidney injury. In the immune system, Kim-1 is also involved in activating the differentiation of Th1, Th2, and Th17. And Kim-1 is also considered as an activating receptor in B cells, dendritic cells, and natural killer T cells.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of mouse Kim-1 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	93
	Range %	87-99
1:2	Average %	92
	Range %	88-98
1:4	Average %	96
	Range %	90-101
1:8	Average %	95
	Range %	92-99

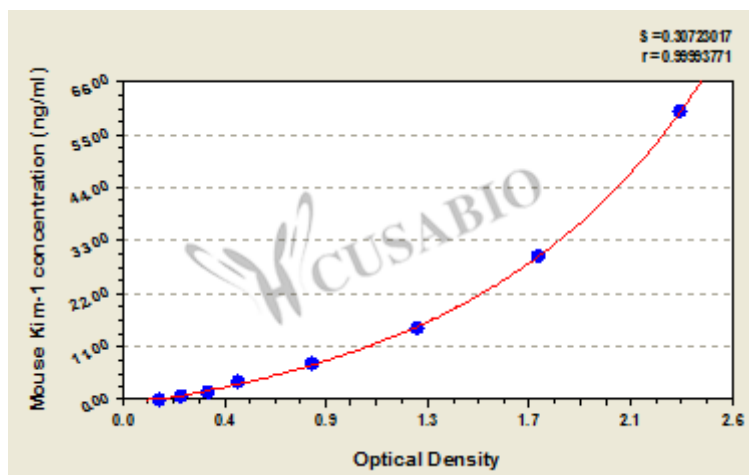
Recovery

The recovery of mouse Kim-1 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	93	89-97
EDTA plasma (n=4)	94	88-99

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
60	2.356	2.345	2.351	2.183
30	1.786	1.725	1.756	1.588
15	1.264	1.236	1.250	1.082
7.5	0.813	0.801	0.807	0.639
3.75	0.513	0.489	0.501	0.333
1.8	0.378	0.363	0.371	0.203
0.9	0.267	0.251	0.259	0.091
0	0.170	0.166	0.168	?

Msds

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