Datasheet for ABIN921116

HAVCR1 ELISA Kit

1 Image | 2 Publications

Go to Product page

Overview

Quantity:	96 tests
Target:	HAVCR1
Binding Specificity:	AA 18-238
Reactivity:	Rat
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Rat KIM1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Tissue Homogenate, Serum, Plasma (heparin), Plasma (EDTA), Urine
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: S18-V238
Specificity:	Expression system for standard: NSO Immunogen sequence: S18-V238
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<2pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g Nacl

Target Details

Target:	HAVCR1
Alternative Name:	HAVCR1 (HAVCR1 Products)
Target Type:	Virus
Background:	Protein Function: May play a role in T-helper cell development and the regulation of asthma and allergic diseases. Receptor for TIMD4. May play a role in kidney injury and repair (By similarity). . Background: KIM1(TIM-1), also known as Hepatitis A virus cellular receptor 1, is a protein that in Rat is encoded by the HAVCR1 gene. Infection of canine osteogenic sarcoma cells expressing HAVCR1 with HAV led to conclude that the protein is indeed a receptor for the virus. Immunofluorescence microscopy demonstrated internalization of HAV by dog cells expressing HAVCR1. Using a monoclonal antibody to rat Tim1, Tim1 was expressed after activation of naive T cells and on T cells differentiated in Th2-polarizing conditions. By homology of synteny with the rat Tim1 gene and database analysis, was mapped the HAVCR1 gene to 5q33.2. Synonyms: Hepatitis A virus cellular receptor 1 homolog,HAVcr-1,Kidney injury molecule 1,KIM-1,T cell immunoglobulin and mucin domain-containing protein 1,TIMD-1,Havcr1,Kim1, Full Gene Name: Hepatitis A virus cellular receptor 1 homolog Cellular Localisation: Membrane, Single-pass type I membrane protein.
Gene ID:	286934
UniProt:	O54947

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Belongs to the immunoglobulin superfamily. TIM family. Tissue Specificity: Expressed at a low level in normal kidney but are increased dramatically in postischemic kidney. Expressed in proliferating bromodeoxyuridine-positive and

Application Details

	dedifferentiated vimentin-positive epithelial cells in regenerating proximal tubules. .
Plate:	Pre-coated
Protocol:	rat KIM1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for KIM1 has been precoated onto 96-well plates. Standards(NSO, S18-V238) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for KIM1 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the rat KIM1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL rat KIM1 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of rat cell culture supernates, tissue homogenates, serum, plasma(heparin, EDTA) or urine to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each rat KIM1 standard solution and each sample be measured in duplicate.
Assay Precision:	• Sample 1: n=16, Mean(pg/ml): 276, Standard deviation: 11.6, CV(%): 4.2 • Sample 2: n=16, Mean(pg/ml): 662, Standard deviation: 35.1, CV(%): 5.3 • Sample 3: n=16, Mean(pg/ml): 1186, Standard deviation: 41.51, CV(%): 3.5, • Sample 1: n=24, Mean(pg/ml): 359, Standard deviation: 22.26, CV(%): 6.2 • Sample 2: n=24, Mean(pg/ml): 710, Standard deviation: 48.28, CV(%): 6.8 • Sample 3: n=24, Mean(pg/ml): 1332, Standard deviation: 75.9, CV(%): 5.7
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

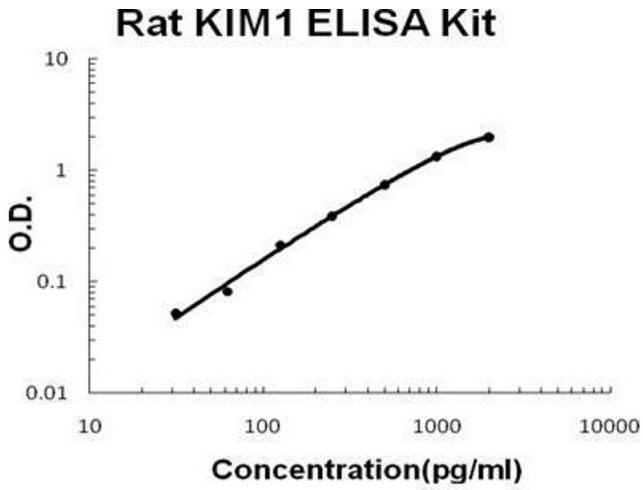
Publications

Product cited in:

Qiu, Sun, Zhang, Li, Wang: "Involvement of the NF-κB signaling pathway in the renoprotective effects of isorhamnetin in a type 2 diabetic rat model." in: **Biomedical reports**, Vol. 4, Issue 5, pp. 628-634, (2016) (PubMed).

Li, Ma, Zhao, Yuan, Li, Wang: "Glycyrrhetinic acid might increase the nephrotoxicity of bakuchiol by inhibiting cytochrome P450 isoenzymes." in: **PeerJ**, Vol. 4, pp. e2723, (2016) (PubMed).

Images



ELISA

Image 1. Rat KIM1 PicoKine ELISA Kit standard curve