

For Research Use Only

# Rat KIM-1/HAVCR1 Recombinant antibody, PBS Only (Capture)

Catalog Number: 83221-2-PBS



## Basic Information

<b>Catalog Number:</b> 83221-2-PBS	<b>GenBank Accession Number:</b> NM_173149.2	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 286934	<b>CloneNo.:</b> 230528C5
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O54947	
<b>Isotype:</b> IgG	<b>Full Name:</b> hepatitis A virus cellular receptor 1	
	<b>Calculated MW:</b> 34 kDa	
	<b>Observed MW:</b> 72 kDa	

## Applications

**Tested Applications:**  
WB, Cytometric bead array, Indirect ELISA

**Species Specificity:**  
mouse, rat

## Product Information

83221-2-PBS targets KIM-1/HAVCR1 as part of a matched antibody pair:

MP00213-2: 83221-2-PBS capture and 83221-4-PBS detection (validated in Cytometric bead array)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

Kidney injury molecule 1 (KIM-1), also known as Hepatitis A virus cellular receptor 1 (HAVCR1), CD365, or T-cell immunoglobulin and mucin domain 1 (TIM-1), is a class I integral membrane glycoprotein, with an ectodomain containing Ig-like domain and a mucin domain. KIM-1 acts as a membrane receptor for hepatitis A virus (HAV) (PMID: 9658108; 8861957). KIM-1 provides a costimulatory signal for T cell activation and inhibits the development of peripheral tolerance (PMID: 16284246; 15793575). KIM-1 may be involved in the regulation of asthma and allergic diseases (PMID: 14534576). It has been reported that KIM-1 is shed into urine after acute kidney damage and is a marker of renal tubular injury (PMID: 14600030).

## Storage

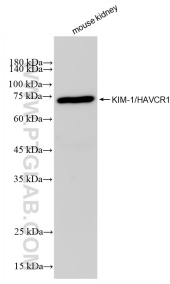
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

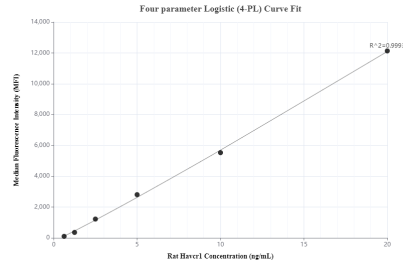
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

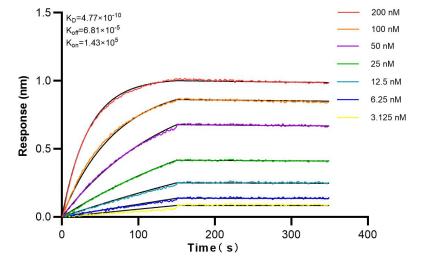
## Selected Validation Data



Mouse kidney tissue was subjected to SDS PAGE followed by western blot with 83221-2-RR (HAVCR1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83221-2-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP00213-2, Rat KIM-1/HAVCR1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83221-2-PBS. Detection antibody: 83221-4-PBS. Standard: Eg0597. Range: 0.625-20 ng/mL.



Bi-layer interferometry (BLI) kinetic assays of 83221-2-RR against Rat HAVCR1 were performed. The affinity constant is 0.477 nM.