

# **TIM-1 Antibody**

Catalog # ASC10421

## **Specification**

# **TIM-1 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

**Application Notes** 

WB, IHC-P, IF, E <u>096D42</u> NP 036338, 153085427

Human, Mouse

Rabbit

**IgG** 

40 kDa KDa

**Polyclonal** 

TIM-1 antibody can be used for the detection of TIM-1 by Western blot at 1 - 2  $\mu$ g/mL. Antibody can also be used for immunohistochemistry starting at 10  $\mu$ g/mL. For immunofluorescence start at 20

μg/mL.

# **TIM-1 Antibody - Additional Information**

Gene ID **26762** 

**Other Names** 

TIM-1 Antibody: TIM, KIM1, TIM1, HAVCR, KIM-1, TIM-1, TIMD1, TIMD-1, HAVCR-1, Hepatitis A virus cellular receptor 1, Kidney injury molecule 1, HAVcr-1, hepatitis A virus cellular receptor 1

**Target/Specificity** 

HAVCR1;

## **Reconstitution & Storage**

Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

TIM-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **TIM-1 Antibody - Protein Information**

Name HAVCR1

Synonyms KIM1, TIM1, TIMD1

#### **Function**

Phosphatidylserine receptor that plays an important functional role in regulatory B-cells homeostasis including generation, expansion and suppressor functions (By similarity). As P-selectin/SELPLG ligand, plays a specialized role in activated but not naive T-cell trafficking during inflammatory responses (PubMed:<a href="http://www.uniprot.org/citations/24703780"">http://www.uniprot.org/citations/24703780</a>



target="\_blank">24703780</a>). Controls thereby T-cell accumulation in the inflamed central nervous system (CNS) and the induction of autoimmune disease (PubMed:<a href="http://www.uniprot.org/citations/24703780" target="\_blank">24703780</a>). Also regulates expression of various anti- inflammatory cytokines and co-inhibitory ligands including IL10 (By similarity). Acts as a regulator of T-cell proliferation (By similarity). May play a role in kidney injury and repair (PubMed:<a href="http://www.uniprot.org/citations/17471468" target="blank">17471468</a>).

#### **Cellular Location**

Cell membrane; Single-pass type I membrane protein

### **Tissue Location**

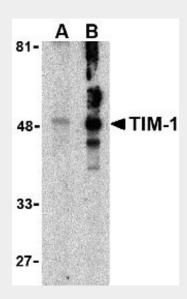
Widely expressed, with highest levels in kidney and testis. Expressed by activated CD4+ T-cells during the development of helper T-cells responses.

# **TIM-1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

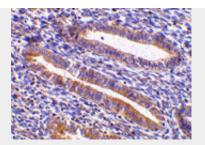
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# TIM-1 Antibody - Images

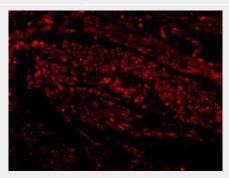


Western blot analysis of TIM-1 in human uterus tissue lysate with TIM-1 antibody at (A) 1 and (B)  $2 \mu g/mL$ .





Immunohistochemistry of TIM-1 in human uterus tissue with TIM-1 antibody at 10 μg/mL.



Immunofluorescence of TIM-1 in Human Uterus cells with TIM-1 antibody at 20 µg/mL.

# TIM-1 Antibody - Background

TIM-1 Antibody: The human form of TIM-1 was initially discovered as a membrane glycoprotein through which the hepatitis A virus can gain entry into a cell. It was also identified as kidney injury molecule 1 (Kim-1), a predicted adhesion molecule that is upregulated on the surfaces of kidney epithelia. It is also expressed on T helper 2 (Th2) cells of the immune system, and following the binding of its natural ligand TIM-4, stimulates T cell expansion and cytokine production in response to viral challenge. It has been suggested that hyperactivation of TIM-1 leads to an increased level of Th2 responsiveness and asthma susceptibility, and antibodies to TIM-1 may therefore be a novel approach to treating asthma.

## **TIM-1 Antibody - References**

Feigelstock D, Thompson P, Mattoo P, et al. The human homolog of HAVcr-1 codes for a hepatitis A virus cellular receptor. J. Virol. 1998; 72:6621-8.

Ichimura T, Bonventre JV, Bailly V, et al. Kidney injury molecule-1 (KIM-1), a putative epithelial cell adhesion molecule containing a novel immunoglobulin domain, is up-regulated in renal cells after injury. J. Biol. Chem.1998; 273:4135-42.

Meyers JH, Sabatos CA, Chakravarti S, et al. The TIM family regulates autoimmune and allergic diseases. Trends Mol. Med. 2005; 11:362-9.

Meyers JH, Chakravarti S, Schlesinger D, et al. TIM-4 is the ligand for TIM-1, and the TIM-1-TIM4 interaction regulates T cell proliferation. Nat. Immunol. 2005; 6:455-64.