

**TIM-1 Antibody**  
**Catalog # ASC10421****Specification**

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**TIM-1 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">Q96D42</a>
Other Accession	<a href="#">NP_036338</a> , <a href="#">153085427</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	40 kDa KDa
Application Notes	TIM-1 antibody can be used for the detection of TIM-1 by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 10 µg/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"

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>). Regulates also 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

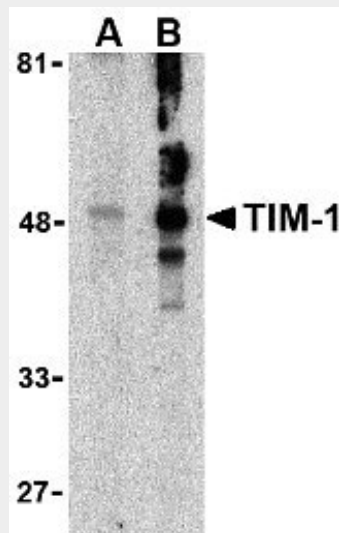
Widely expressed, with highest levels in kidney and testis. Expressed by activated CD4+ T-cells during the development of helper T-cells responses.

#### TIM-1 Antibody - Protocols

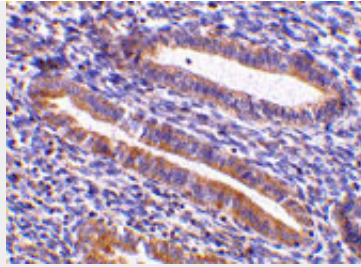
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

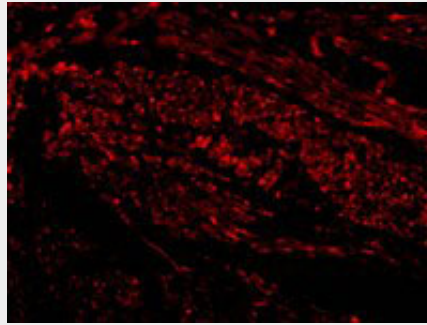
#### TIM-1 Antibody - Images



Western blot analysis of TIM-1 in human uterus tissue lysate with TIM-1 antibody at (A) 1 and (B) 2 µg/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.