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TIM-1 Antibody
Catalog # ASC10422

Specification

TIM-1 Antibody - Product Information

Application	**WB, E**
Primary Accession	Q96D42
Other Accession	NP_036338, 153085427
Reactivity	**Human, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**TIM-1 antibody can be used for the detection of TIM-1 by Western blot at 1 - 2 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
TIM-1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. 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:24703780). Controls thereby T-cell accumulation in the inflamed central nervous system (CNS) and the induction of autoimmune disease (PubMed:24703780). 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:17471468).

Cellular Location
Cell membrane; Single-pass type I membrane protein

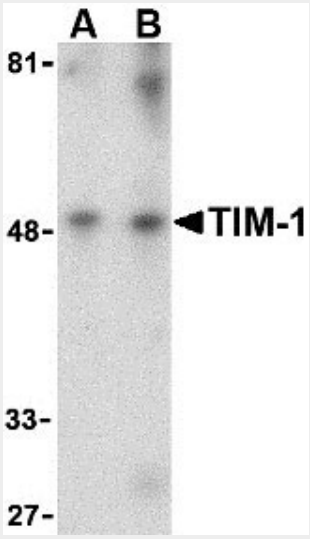
Tissue Location
Widely expressed, with highest levels in kidney and testis. Expressed by activated CD4+ T-cells during the development of helper T-cells responses.

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 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 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.