

Tim-3 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10622**Specification**

Tim-3 Antibody - Product Information

Application	WB
Primary Accession	Q8TDQ0
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	33394

Tim-3 Antibody - Additional Information**Gene ID** 84868**Application & Usage**

Western blotting (0.5-4 µg/ml) and Immunohistochemistry (5 µg/ml). However, the optimal conditions should be determined individually. The antibody detects a 33 kDa human Tim-3 on SDS-PAGE immunoblots. Other applications have not been determined.

Other Names

tim-3, tim3, tim 3, TIMD3, TIMD-3, T-cell immunoglobulin and mucin domain-containing protein 3, T-cell membrane protein 3

Target/Specificity

Tim

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.5 mg/ml) affinity purified rabbit polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

Tim-3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Tim-3 Antibody - Protein Information

Name HAVCR2

Synonyms TIM3, TIMD3

Function

Cell surface receptor implicated in modulating innate and adaptive immune responses. Generally accepted to have an inhibiting function. Reports on stimulating functions suggest that the activity may be influenced by the cellular context and/or the respective ligand (PubMed:24825777). Regulates macrophage activation (PubMed:11823861). Inhibits T-helper type 1 lymphocyte (Th1)-mediated auto- and alloimmune responses and promotes immunological tolerance (PubMed:14556005). In CD8+ cells attenuates TCR-induced signaling, specifically by blocking NF-kappaB and NFAT promoter activities resulting in the loss of IL-2 secretion. The function may implicate its association with LCK proposed to impair phosphorylation of TCR subunits, and/or LGALS9-dependent recruitment of PTPRC to the immunological synapse (PubMed:24337741, PubMed:26492563). In contrast, shown to activate TCR-induced signaling in T-cells probably implicating ZAP70, LCP2, LCK and FYN (By similarity). Expressed on Treg cells can inhibit Th17 cell responses (PubMed:24838857). Receptor for LGALS9 (PubMed:16286920, PubMed:24337741). Binding to LGALS9 is believed to result in suppression of T-cell responses; the resulting apoptosis of antigen- specific cells may implicate HAVCR2 phosphorylation and disruption of its association with BAG6. Binding to LGALS9 is proposed to be involved in innate immune response to intracellular pathogens. Expressed on Th1 cells interacts with LGALS9 expressed on Mycobacterium tuberculosis- infected macrophages to stimulate antibactericidal activity including IL-1 beta secretion and to restrict intracellular bacterial growth (By similarity). However, the function as receptor for LGALS9 has been challenged (PubMed:23555261). Also reported to enhance CD8+ T-cell responses to an acute infection such as by Listeria monocytogenes (By similarity). Receptor for phosphatidylserine (PtSer); PtSer-binding is calcium-dependent. May recognize PtSer on apoptotic cells leading to their phagocytosis. Mediates the engulfment of apoptotic cells by dendritic cells. Expressed on T-cells, promotes conjugation but not engulfment of apoptotic cells. Expressed on dendritic cells (DCs) positively regulates innate immune response and in synergy with Toll- like receptors promotes secretion of TNF-alpha. In tumor-infiltrating DCs suppresses nucleic acid-mediated innate immune response by interaction with HMGB1 and interfering with nucleic acid-sensing and trafficking of nucleic acids to endosomes (By similarity). Expressed on natural killer (NK) cells acts as a coreceptor to enhance IFN-gamma production in response to LGALS9 (PubMed:22323453). In contrast, shown to suppress NK cell-mediated cytotoxicity (PubMed:22383801). Negatively regulates NK cell function in LPS-induced endotoxic shock (By similarity).

Cellular Location

Membrane; Single-pass type I membrane protein. Cell junction. Cell membrane. Note=Localizes to the immunological synapse between CD8+ T-cells and target cells

Tissue Location

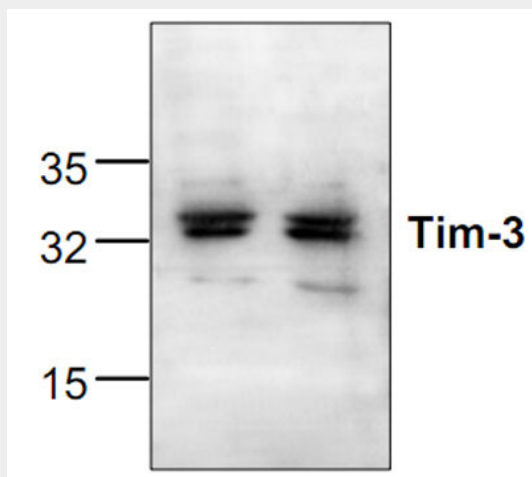
Expressed in T-helper type 1 (Th1) lymphocytes. Expressed on regulatory T (Treg) cells after TCR stimulation. Expressed in dendritic cells and natural killer (NK) cells. Expressed in epithelial tissues. Expression is increased on CD4+ and CD8+ T-cells in chronic hepatitis C virus (HCV) infection. In progressive HIV-1 infection, expression is up-regulated on HIV-1-specific CD8 T-cells

Tim-3 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-3 Antibody - Images



Western blot analysis of Tim-3 expression in Jurkat cell lysate.

Tim-3 Antibody - Background

As a member of the T cell immunoglobulin and mucin domain (TIM) family, Tim-3 is reported to promote or terminate Th1 immunity and is thought to influence a range of inflammatory conditions. It is constitutively expressed in a subset of murine IFNgamma-secreting Th1 cells, but not Th2 cells, in both human and mice. Additionally, Tim-3 is expressed dendritic cells, and by a subset of CD4+ cells where its levels of expression increase upon anti-CD3/28 stimulation. This molecule is also highly expressed in in vitro polarized Th1 cells, and at lower levels in Th17 cells. It is known to synergize with Toll-like receptors and is thought to regulate Th1 and Th17 cytokine secretion.