abcam

Product datasheet

Anti-TIM 3 antibody [TIM3/3113] ab268138

1 References 4 Images

Overview

Product name	Anti-TIM 3 antibody [TIM3/3113]
Description	Mouse monoclonal [TIM3/3113] to TIM 3
Host species	Mouse
Tested applications	**Suitable for:** IHC-P, Protein Array
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment within Human TIM 3 aa 22-202. The exact sequence is proprietary. Database link: **Q8TDQ0**
Positive control	IHC-P: Human adrenal gland and tonsil tissue.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
Purity	Protein A/G purified
Purification notes	Purified from Bioreactor concentrate
Clonality	Monoclonal
Clone number	TIM3/3113
Isotype	IgG2a
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab268138 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Protein Array		Use at an assay dependent concentration.

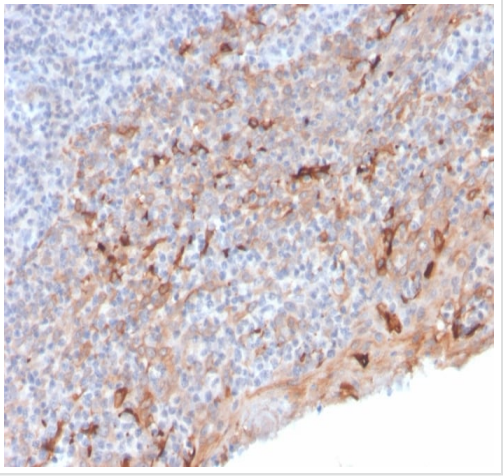
Target

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-imfiltrating DCs suppresses nucleic acid-mediated innate immune repsonse by interaction with HMGB1 and interfering with nucleic acid-sensing and trafficking of nucleid 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.

Tissue specificity 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

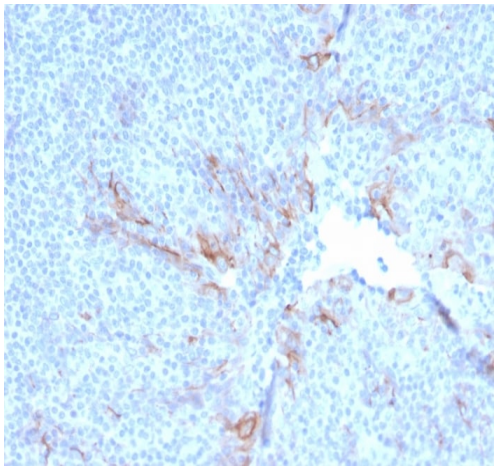
	tissues. Expression is increased on CD4+ and CD8+ T-cells in chronic hepatitis C virus (HCV) infection. In progressive HIV-1 infection, expression is up-regulated on HIV-1-specific CD8 T-cells.
Involvement in disease	May be involved in T-cell exhaustion associated with chronic viral infections such as with human immunodeficiency virus (HIV) and hepatitic C virus (HCV).
Sequence similarities	Belongs to the immunoglobulin superfamily. TIM family. Contains 1 Ig-like V-type (immunoglobulin-like) domain.
Post-translational modifications	O-glycosylated with core 1 or possibly core 8 glycans. Phosphorylated on tyrosine residues; modestly increased after TCR/CD28 stimulation. Can be phosphorylated in the cytoplasmatic domain by FYN (By similarity). Phosphorylation at Tyr-265 is increased by stimulation with ligand LGALS9.
Cellular localization	Membrane. Cell junction. Localizes to the immunological synapse between CD8+ T-cells and target cells.

Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIM 3 antibody [TIM3/3113] (ab268138)

Formalin-fixed, paraffin-embedded human tonsil tissue stained for TIM 3 using ab268138 at 2 µg/ml in immunohistochemical analysis.



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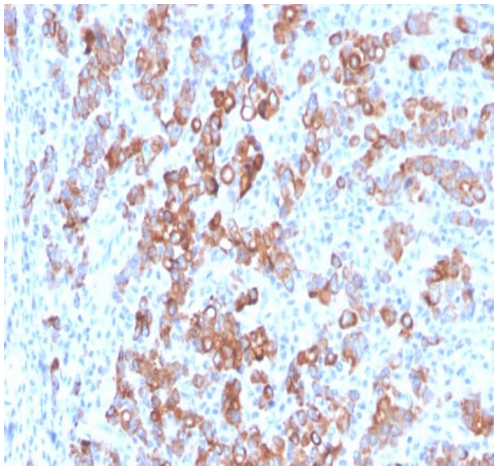
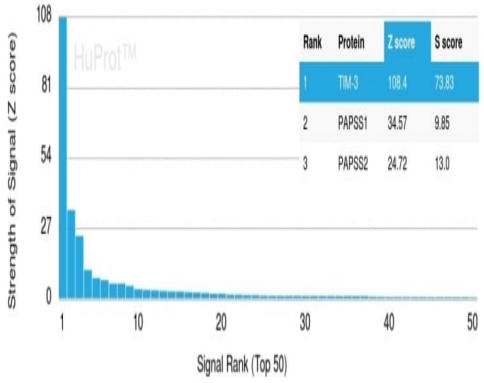


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIM 3 antibody [TIM3/3113] (ab268138)

Formalin-fixed, paraffin-embedded human adrenal gland tissue stained for TIM 3 using ab268138 at 2 µg/ml in immunohistochemical analysis.



Protein Array - Anti-TIM 3 antibody [TIM3/3113] (ab268138)

Protein Array containing more than 19,000 full-length human proteins using ab268138.

Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SDs) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SDs) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.