

Product datasheet

Anti-TIM 3 antibody ab47997

★★★★☆ 1 Abreviews 1 References 4 图像

概述

产品名称	Anti-TIM 3抗体
描述	山羊多克隆抗体to TIM 3
宿主	Goat
经测试应用	适用于: WB, ICC/IF, IHC-P
种属反应性	与反应: Human 预测可用于: Dog, Non human primates
免疫原	Synthetic peptide: C-KWYSHSKEKIQN , corresponding to internal sequence amino acids 225-236 of Human TIM 3 Run BLAST with Run BLAST with
阳性对照	Human tonsil, thymus, lymph node and spleen lysates. Lysates prepared from transfected HEK293 cells transiently expressing TIM 3. This antibody gave a positive result when used in the following methanol fixed cell lines: Hek293

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	Preservative: 0.02% Sodium Azide Constituents: 0.5% BSA, Tris buffered saline, pH 7.3
纯度	Immunogen affinity purified
纯化说明	Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.
克隆	多克隆
同种型	IgG

应用

Our [Abpromise guarantee](#) covers the use of **ab47997** in the following tested applications.

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

应用	Ab评论	说明
WB		Use a concentration of 0.3 - 1 µg/ml. Detects a band of approximately 35 kDa (predicted molecular weight: 33 kDa).
ICC/IF		Use a concentration of 10 µg/ml.
IHC-P	★★★★★	Use at an assay dependent concentration. PubMed: 25757669

靶标

功能

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.

组织特异性

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.

疾病相关

May be involved in T-cell exhaustion associated with chronic viral infections such as with human

immunodeficiency virus (HIV) and hepatitis C virus (HCV).

序列相似性

Belongs to the immunoglobulin superfamily. TIM family.
Contains 1 Ig-like V-type (immunoglobulin-like) domain.

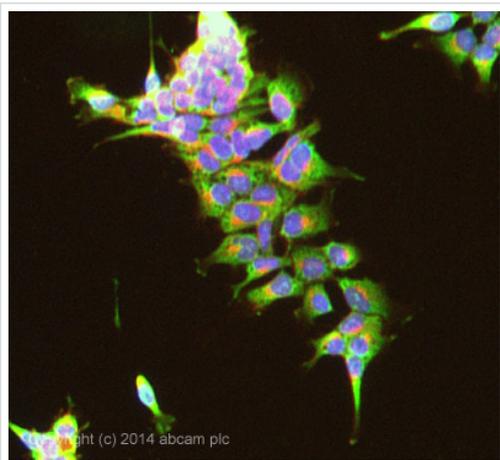
翻译后修饰

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 cytoplasmic domain by FYN (By similarity). Phosphorylation at Tyr-265 is increased by stimulation with ligand LGALS9.

细胞定位

Membrane. Cell junction. Localizes to the immunological synapse between CD8+ T-cells and target cells.

图片



Immunocytochemistry/ Immunofluorescence - Anti-TIM 3 antibody (ab47997)

ICC/IF image of ab47997 stained Hek293 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 0.3M glycine in 0.1% PBS-Tween (no animal serum) for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab47997 at 10µg/ml overnight at +4°C. The secondary antibody (pseudo-colored green) was Alexa Fluor® 488 donkey anti- goat (ab150133) IgG used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1h at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43µM for 1 hour at room temperature.



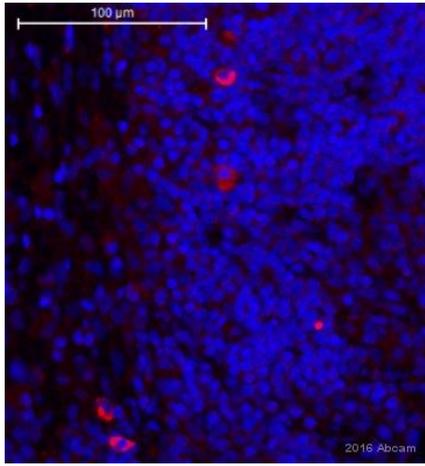
Western blot - Anti-TIM 3 antibody (ab47997)

Anti-TIM 3 antibody (ab47997) at 0.3 µg/ml + human tonsil lysate at 35 µg

Predicted band size: 33 kDa

Observed band size: 35 kDa

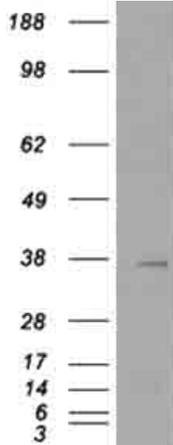
Primary incubation was 1 hour. Detected by chemiluminescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIM 3 antibody (ab47997)

This image is courtesy of an anonymous Abreview

ab47997 staining TIM 3 in Dog lymph node tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with 10% NBF and blocked with 15% serum for 1 hour at 23°C; antigen retrieval was by heat mediation in a Tris/EDTA buffer. Samples were incubated with primary antibody (1/250 in TBS) for 16 hours at 23°C. An Alexa Fluor® 647-conjugated Donkey anti-goat IgG polyclonal (1/400) was used as the secondary antibody.



Western blot - Anti-TIM 3 antibody (ab47997)

Anti-TIM 3 antibody (ab47997) at 1 μg/ml + lysates prepared from transfected HEK293 cells transiently expressing TIM 3

Predicted band size: 33 kDa

Observed band size: 35 kDa

This band is not observed in the non-transfected HEK293.

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