abcam

ab323414

Anti-TIM 1 antibody [RM1294]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Multiclonal
Immunogens	The exact immunogen used to generate this antibody is proprietary information.
Clone number	RM1294
Purification technique	Affinity purification Protein A
Concentration	0.505 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Mouse
Dilution info	1/2000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Species	Mouse
Dilution info	1/100
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1/50
Notes	-

Species	Mouse
Dilution info	1/50
Notes	-

WB

Tested

Species	Human
Dilution info	1/500
Notes	-

Species	Mouse
Dilution info	1/1000
Notes	-

IP

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Not recommended

Species	Human
Dilution info	-
Notes	-

Target data

See full target information HAVCR1

Function

Phosphatidylserine receptor that plays an important functional role in regulatory B-cell 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). Confers phagocytic ability on injured kidney epithelial cells, allowing them to bind to and internalize apoptotic bodies and necrotic debris following kidney injury (PubMed:18414680). The ectodomain binds to the surface of apoptotic kidney epithelial cells via phosphatidylserine and oxidized phospholipids exposed on the cell membrane of the apoptotic cells (PubMed:18414680). HAVCR1-expressing cells are also capable of phagocytosing Gram-negative and Gram-positive bacteria (PubMed:18414680). (Microbial infection) Acts as a receptor for Hepatitis A virus. (Microbial infection) Acts as a receptor for Ebolavirus and Marburg virus by binding exposed phosphatidyl-serine at the surface of virion membrane (PubMed:21536871). Serves as a dual receptor for Ebolavirus by also interacting with envelope glycoprotein GP (PubMed:26487564). (Microbial infection) Acts as a receptor for Dengue virus by binding exposed phosphatidyl-serine at the surface of virion membrane (PubMed:23084921). TIM1 and Dengue

virus are co-internalized during virus entry (PubMed:29742433). (Microbial infection) Acts as a receptor for Zika virus by binding to envelope protein E. (Microbial infection) Plays a positive role in Chikungunya virus cell entry.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are recombinant multiclonals?
Recombinant multiclonals are a mixture of recombinant antibodies co-expressed from a library of heavy and light chains. They offer several advantages including:

- The sensitivity of polyclonal antibodies by recognising multiple epitopes
- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

View our range of recombinant multiclonal antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

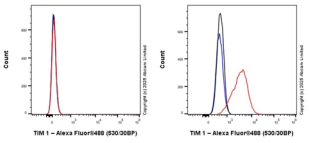
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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10 product images

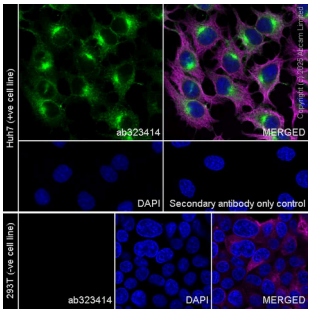


Flow Cytometry - Anti-TIM 1 antibody [RM1294] (ab323414)

Flow cytometric analysis of 293T (human embryonic kidney epithelial cell, Left) / Huh7 (human hepatocellular carcinoma epithelial cell, Right) cells labelling TIM 1 with ab323414 at 1/50 dilution (1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.

Negative control: 293T.



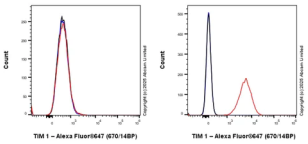
Immunocytochemistry/ Immunofluorescence - Anti-TIM 1 antibody [RM1294] (ab323414)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Huh7 (human hepatocellular carcinoma epithelial cell) cells labelling TIM 1 with ab323414 at 1/100 (4.94 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/ 1000 2ug/ml dilution (Green).

Confocal image showing cytoplasmic and membrane staining in Huh7 cell line (shown in green). The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue).
Negative control: 293T (PMID:23084921)
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Magenta). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/ 1000 2ug/ml dilution.

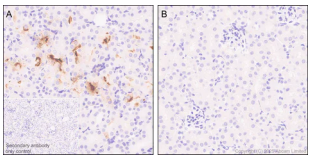


Flow Cytometry - Anti-TIM 1 antibody [RM1294] (ab323414)

Flow cytometric analysis of MEF (mouse embryo fibroblast, Left) / A20 (mouse reticulum sarcoma B lymphocyte, Right) cells labelling TIM 1 with ab323414 at 1/50 dilution (1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat anti-Rabbit IgG (Alexa Fluor® 647, ab150083) at 1/5000 dilution was used as the secondary antibody.

Low expression: MEF.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIM 1 antibody [RM1294] (ab323414)

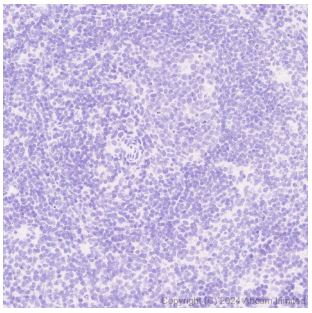
Immunohistochemical analysis of paraffin-embedded (A) Injured mouse kidney (cisplatin-induced acute kidney injury). (B) Control mouse kidney. tissue labeling TIM 1 with ab323414 at 1/2000 (0.247 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used.

Positive staining on (A) Injured mouse kidney (cisplatin-induced acute kidney injury), no staining on (B) control mouse kidney. The section was incubated with ab323414 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TIM 1 antibody [RM1294] (ab323414)

TIM 1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse spleen using rabbit Anti-TIM 1 antibody

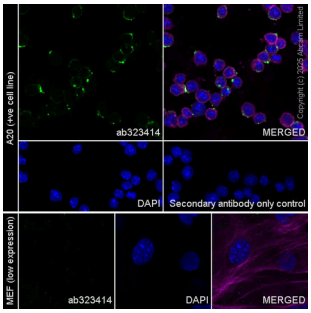
Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling TIM 1 with ab323414 at 1/2000 (0.247 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used.

Negative control: no staining on mouse spleen. The section was incubated with ab323414 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



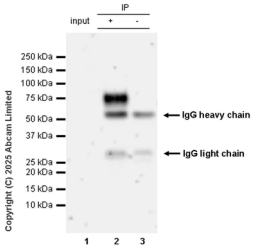
Immunocytochemistry/ Immunofluorescence - Anti-TIM 1 antibody [RM1294] (ab323414)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized A20 (mouse reticulum sarcoma B lymphocyte) cells labelling TIM 1 with ab323414 at 1/100 (4.94 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/ 1000 2ug/ml dilution (Green).

Confocal image showing membrane staining in A20 cell line (shown in green). The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue).
Low expression: MEF.
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Magenta). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/ 1000 2ug/ml dilution.



Immunoprecipitation - Anti-TIM 1 antibody [RM1294] (ab323414)

TIM 1 was immunoprecipitated from 0.35 mg A20 (mouse reticulum sarcoma B lymphocyte) whole cell lysate with ab323414 at 1/1000 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab323414 at 1/1000 dilution.

Blocking and dilution buffer and concentration: 5% NFDM/TBST

All lanes:
Immunoprecipitation - Anti-TIM 1 antibody [RM1294] (ab323414) at 1/1000 dilution

Lane 1:
A20 (mouse reticulum sarcoma B lymphocyte) whole cell lysate at 10 µg

Lane 2:
ab323414 at 1/30 IP in A20 (mouse reticulum sarcoma B lymphocyte) whole cell lysate at 10 µg

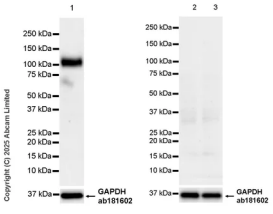
Lane 3:
Rabbit monoclonal IgG (ab172730) instead of ab323414 in A20 whole cell lysate at 10 µg

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Observed band size: 70 kDa

Exposure time: 180s



Western blot - Anti-TIM 1 antibody [RM1294] (ab323414)

TIM 1 Western blot staining using rabbit Anti-TIM 1 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Negative control: 293T (PMID:23084921, PMID: 12138159), HeLa

The molecular weight observed is consistent with what has been described in the literature (PMID: 12138159, PMID: 35073759).

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

Lysates were freshly made and used for Western blotting immediately to minimize protein degradation.
All lanes:
Western blot - Anti-TIM 1 antibody [RM1294] (ab323414) at 1/500 dilution

Lane 1:
Huh7 (human hepatocellular carcinoma epithelial cell) fresh whole cell lysate at 20 µg

Lane 2:
HeLa (human cervical adenocarcinoma epithelial cell) fresh whole cell lysate at 20 µg

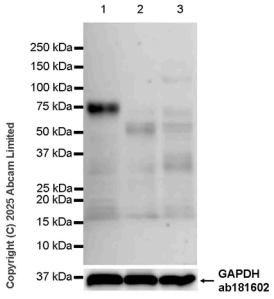
Lane 3:
293T (human embryonic kidney epithelial cell) fresh whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 100 kDa, 36 kDa

Exposure time: 48s



Western blot - Anti-TIM 1 antibody [RM1294] (ab323414)

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Low expression: MEF and Neuro-2a

The molecular weight observed is consistent with what has been described in the literature (PMID: 12138159, PMID: 37460623).

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

All lanes:
Western blot - Anti-TIM 1 antibody [RM1294] (ab323414) at 1/1000 dilution

Lane 1:
A20 (mouse reticulum sarcoma B lymphocyte) whole cell lysate at 20 µg

Lane 2:
MEF (mouse embryo fibroblast) whole cell lysate at 20 µg

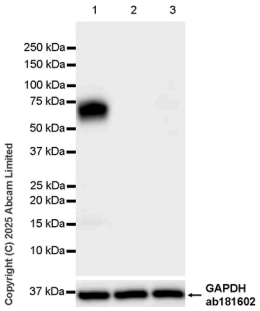
Lane 3:
Neuro-2a (mouse neuroblastoma neuroblast) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 70 kDa, 36 kDa

Exposure time: 81s



Western blot - Anti-TIM 1 antibody [RM1294] (ab323414)

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Negative control: kidney (PMID: 37460623), spleen

The molecular weight observed is consistent with what has been described in the literature (PMID: 12138159, PMID: 37460623).

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

All lanes:
Western blot - Anti-TIM 1 antibody [RM1294] (ab323414) at 1/1000 dilution

Lane 1:
Mouse injured kidney tissue lysate (cisplatin-induced acute kidney injury) at 20 µg

Lane 2:
Mouse kidney tissue lysate at 20 µg

Lane 3:
Mouse spleen tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 70 kDa, 36 kDa

Exposure time: 26s

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