abcam

ab323574

Anti-CD37 antibody [RM1306]

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	RM1306
Purification technique	Affinity purification Protein A
Specificity	Unsuitable for human ICC/IF.
Concentration	0.504 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Species	Mouse
Dilution info	1/1000
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/300
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/1200
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Not recommended

Species	Rat
Dilution info	-
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1/500

Notes	-

Species	Mouse
Dilution info	1/500
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	1/1000
Notes	-

Species	Mouse
Dilution info	1/1000
Notes	-

Not recommended

Species	Rat
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/50

Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

Target data

See full target information CD37

Function	Structural component of specialized membrane microdomains known as tetraspanin-enriched microdomains (TERMs), which act as platforms for receptor clustering and signaling. Participates thereby in diverse biological functions such as cell signal transduction, adhesion, migration and protein trafficking (PubMed:22624718). Upon ligand binding, two signaling pathways are activated, one acting through phosphorylation by LYN leading to cell death or a survival pathway with activation of GSK3B (PubMed:22624718). Plays an essential role essential for clustering of integrin ITGA4/ITGB1 and promotes its mobility in the plasma membrane of B-cells. In turn, participates in ITGA4/ITGB1 integrin-mediated antiapoptotic signaling through AKT (By similarity). Also plays a role in the migration of dendritic cells and neutrophils to draining lymph nodes, as well as in their integrin-mediated adhesion (By similarity). Negatively regulates IL-6 responses through direct interaction with SOCS3 thereby preventing constitutive IL-6 signaling (PubMed:26784544). Alternatively, inhibition of IL-6 signaling can also occur via interaction and stabilization of DECTIN1/CLEC7A at the cell membrane to inhibit its ability to promote the production of IL-6 (PubMed:17182550).

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

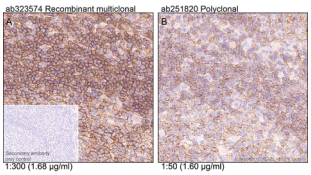
We do not recommend this combination. It is not covered by our product promise.

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.

13 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD37 antibody [RM1306] (ab323574)

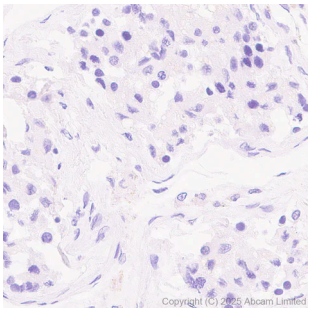
Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling CD37 with ab323574 at 1/300 (1.68 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on human tonsil.
The image on (A) ab323574 is applied with Anti-CD37 antibody at 1/300 dilution and (B) ab251820 is applied with Anti-CD37 antibody at 1/50 dilution.
The section was incubated with ab323574 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).

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD37 antibody [RM1306] (ab323574)

CD37 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human testis using rabbit Anti-CD37 antibody

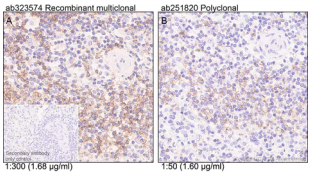
Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling CD37 with ab323574 at 1/300 (1.68 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Negative control: no staining on human testis.
The section was incubated with ab323574 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).

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD37 antibody [RM1306] (ab323574)

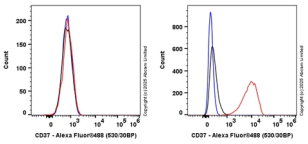
Immunohistochemical analysis of paraffin-embedded Human spleen tissue labeling CD37 with ab323574 at 1/300 (1.68 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on human spleen.
The image on (A) ab323574 is applied with Anti-CD37 antibody at 1/300 dilution and (B) ab251820 is applied with Anti-CD37 antibody at 1/50 dilution.
The section was incubated with ab323574 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).

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins

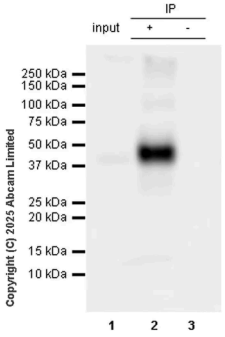


Flow Cytometry - Anti-CD37 antibody [RM1306] (ab323574)

Flow cytometric analysis of MCF7 (human breast adenocarcinoma epithelial cell, Left) / Daudi (human Burkitt's lymphoma lymphoblast, Right) cells labelling CD37 with ab323574 at 1/500 dilution (0.1 ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left 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.

Low expression: MCF7.



Immunoprecipitation - Anti-CD37 antibody [RM1306] (ab323574)

CD37 was immunoprecipitated from 0.35 mg Daudi (human Burkitt's lymphoma lymphoblast) whole cell lysate with ab323574 at 1/1000 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab323574 at 1/1000 dilution.

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

All lanes:
Immunoprecipitation - Anti-CD37 antibody [RM1306] (ab323574) at 1/1000 dilution

Lane 1:
Daudi (human Burkitt's lymphoma lymphoblast) whole cell lysate at 10 µg

Lane 2:
ab323574 at 1/30 IP in Daudi (human Burkitt's lymphoma lymphoblast) whole cell lysate at 10 µg

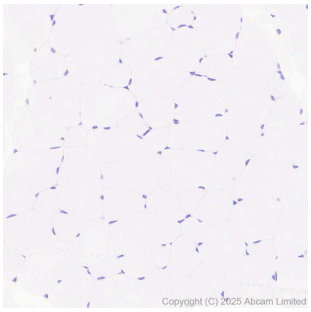
Lane 3:
Rabbit monoclonal IgG (ab172730) instead of ab323574 in Daudi whole cell lysate at 10 µg

Secondary

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

Observed band size: 40 kDa

Exposure time: 6s



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD37 antibody [RM1306] (ab323574)

CD37 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse skeletal muscle using rabbit Anti-CD37 antibody

Immunohistochemical analysis of paraffin-embedded Mouse skeletal muscle tissue labeling CD37 with ab323574 at 1/1200 (0.42 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

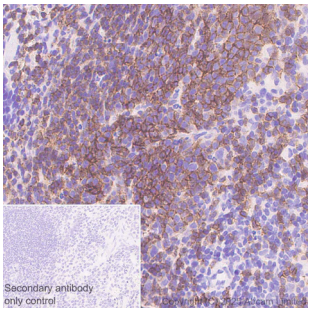
Negative control: no staining on mouse skeletal muscle.
The section was incubated with ab323574 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

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

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD37 antibody [RM1306] (ab323574)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling CD37 with ab323574 at 1/1200 (0.42 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

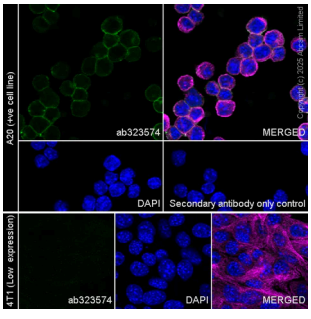
Positive staining on mouse spleen.
The section was incubated with ab323574 for 30 mins at room temperature.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

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

Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 20 mins

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Immunocytochemistry/ Immunofluorescence - Anti-CD37 antibody [RM1306] (ab323574)

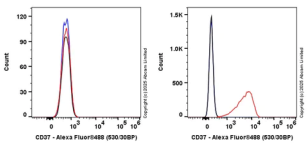
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Tween-20 permeabilized A20 (mouse reticulum sarcoma B lymphocyte) cells labelling CD37 with ab323574 at 1/50 (10.08 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/ 1000 2ug/ml dilution (Green).

Confocal image showing membranous staining in A20 cells (shown in green). The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue).
Low expression: 4T1.
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.

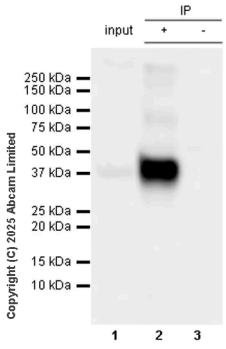


Flow Cytometry - Anti-CD37 antibody [RM1306] (ab323574)

Flow cytometric analysis of 4T1 (mouse mammary gland carcinoma epithelial cell, Left) / A20 (mouse reticulum sarcoma B lymphocyte, Right) cells labelling CD37 with ab323574 at 1/500 dilution (0.1 ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left 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: 4T1.



Immunoprecipitation - Anti-CD37 antibody [RM1306] (ab323574)

CD37 was immunoprecipitated from 0.35 mg A20 (mouse reticulum sarcoma B lymphocyte) whole cell lysate with ab323574 at 1/1000 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab323574 at 1/1000 dilution.

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

All lanes:
Immunoprecipitation - Anti-CD37 antibody [RM1306] (ab323574) at 1/1000 dilution

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

Lane 2:
ab323574 at 1/30 IP in A20 (mouse reticulum sarcoma B lymphocyte) whole cell lysate at 10 µg

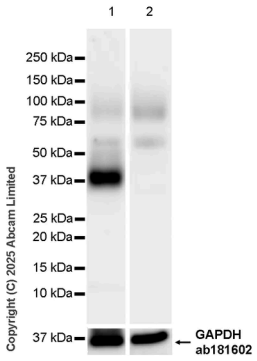
Lane 3:
Rabbit monoclonal IgG (ab172730) instead of ab323574 in A20 whole cell lysate at 10 µg

Secondary

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

Observed band size: 40 kDa

Exposure time: 6s



Western blot - Anti-CD37 antibody [RM1306] (ab323574)

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

Negative control: testis.

Samples are non-boiled as boiling may cause protein aggregation.

The identity of the bands between 50 kDa and 100 kDa are unknown.

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

All lanes:
Western blot - Anti-CD37 antibody [RM1306] (ab323574) at 1/1000 dilution

Lane 1:
Human tonsil tissue lysate at 20 µg

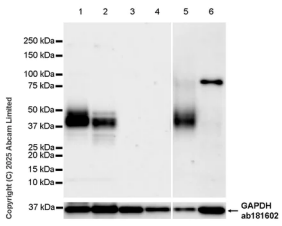
Lane 2:
Human testis tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 40 kDa, 36 kDa

Exposure time: 37s



Western blot - Anti-CD37 antibody [RM1306] (ab323574)

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

Negative control: MCF7 (PMID: 33652767), HepG2, heart.

Samples are non-boiled as boiling may cause protein aggregation.

The identity of the higher MW band at approximately 75 kDa (in lane 6) is unknown.

The molecular weight observed is consistent with what has been described in the literature (PMID: 33652767, PMID: 23267131, PMID: 38846084).

This blot of lane 5-6 was developed using a high-sensitivity ECL substrate, allowing for the detection of proteins in the mid-femtogram range.

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

Exposure time: Lane 1-4: 81 seconds Lane 5-6: 92 seconds

All lanes:
Western blot - Anti-CD37 antibody [RM1306] (ab323574) at 1/1000 dilution

Lane 1:
Daudi (human Burkitts lymphoma lymphoblast) whole cell lysate at 20 µg

Lane 2:
Raji (human Burkitts lymphoma B lymphocyte) whole cell lysate at 20 µg

Lane 3:

MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysate at 20 µg

Lane 4:
HepG2 (human hepatocellular carcinoma epithelial cell) whole cell lysate at 20 µg

Lane 5:
Mouse spleen tissue lysate at 20 µg

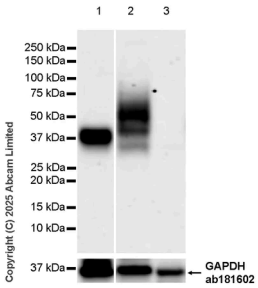
Lane 6:
Mouse heart tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 40-50 kDa, 36 kDa

Western blot - Anti-CD37 antibody [RM1306] (ab323574)



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

Low expression: 4T1.

Samples are non-boiled as boiling may cause protein aggregation.

The molecular weight observed is consistent with what has been described in the literature (PMID: 33333768).

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

All lanes:
Western blot - Anti-CD37 antibody [RM1306] (ab323574) at 1/1000 dilution

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

Lane 2:
WEHI-231 (mouse B cell lymphoma B lymphocyte) whole cell lysate at 20 µg

Lane 3:
4T1 (mouse mammary gland carcinoma epithelial cell) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 40-64 kDa, 36 kDa

Exposure time: 103s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.