abcam

ab302522

Anti-XCL1+XCL2 antibody [EPR26181-30]

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	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR26181-30
Purification technique	Affinity purification Protein A
Concentration	0.432 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/500
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

IHC-Fr

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/500
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	1/30
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information XCL1

Function	Chemotactic activity for lymphocytes but not for monocytes or neutrophils. In thymus, mediates medullary accumulation of thymic dendritic cells and contributes to regulatoy T cell development, playing a role in self-tolerance establishment.

Storage

Shipped at conditions	Conditional Ambient

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 the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	XCL1 and XCL2 also known as lymphotactin or ATAC are small proteins from the chemokine family. These proteins serve as chemotactic agents guiding the migration of immune cells to sites of inflammation or injury. XCL1 and XCL2 have an approximate molecular mass of 10 kDa. They are mainly expressed in activated T cells and natural killer (NK) cells. Their expression is most prominent in tissues involved in immune responses including spleen and lymph nodes.
Biological function summary	XCL1 and XCL2 engage in guiding lymphocytes to the site where they are needed such as inflamed or infected tissue areas. They do not form part of larger protein complexes but function independently to attract specific types of immune cells. By binding to their receptor XCR1 on dendritic cells and other immune cells they instigate responses that are critical for initiating and regulating immune surveillance and responses.
Pathways	XCL1 and XCL2 are involved in the chemokine signaling pathway that orchestrates the movement and position of immune cells within tissues. They interact with proteins such as the XCR1 receptor on cell surfaces triggering signaling cascades

	that facilitate inflammatory responses. The chemokine signaling pathway is closely linked with other immune pathways such as the cytokine-cytokine receptor interaction pathway allowing cross-talk and intervention of various immune mediators.
Associated diseases and disorders	XCL1 and XCL2 have been linked to autoimmune conditions like rheumatoid arthritis and some cancer types where inflammation plays a significant role. During chronic inflammation their dysregulated expression can lead to exacerbated immune responses contributing to disease pathogenesis. The interaction with XCR1 and its presence on dendritic cells is important for understanding their involvement in such disorders. Additionally their connection to other inflammatory cytokines can amplify the inflammatory cascade impacting disease progression and patient outcomes.

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

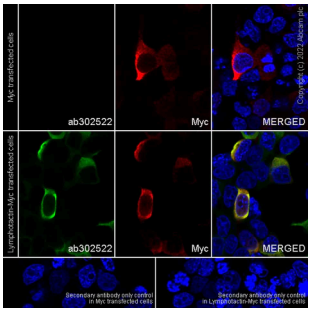
We do not recommend this combination. It is not covered by our product promise.

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.

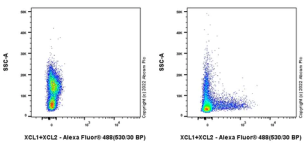
Full details and terms and conditions can be found here:
Terms & Conditions.

6 product images



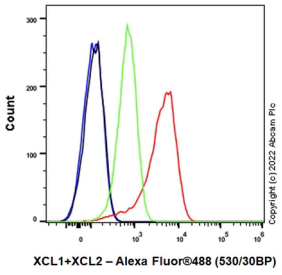
Immunocytochemistry - Anti-XCL1+XCL2 antibody [EPR26181-30] (ab302522)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HEK-293T (human embryonic kidney epithelial cell) cells labelling XCL1+XCL2 with ab302522 at 1/100 (4.32 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing cytoplasmic staining in HEK-293T cells transfected with a human SCN2A expression vector containing a myc-tag. is observed. Myc-Tag Mouse mAb (Alexa Fluor® 647) was used to counterstain tubulin at 1/100 0.38ug/ml dilution (Red). 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 2 ug/ml dilution.



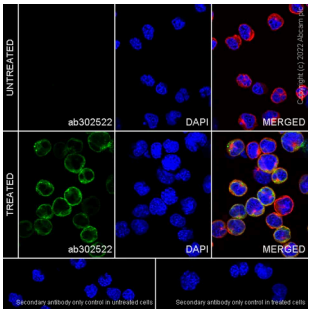
Flow Cytometry (Intracellular) - Anti-XCL1+XCL2 antibody [EPR26181-30] (ab302522)

Flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized Human peripheral blood mononuclear cell (PBMC) treated with 80nM TPA, 1.3uM Ionomycin, 10uM BFA and 2uM Monensin for 6h (Right) / Untreated control (Left) cells labelling XCL1+XCL2 with ab302522 at 1/500 dilution (0.1ug)/ Left and Right (Red) compared with a isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-XCL1+XCL2 antibody [EPR26181-30] (ab302522)

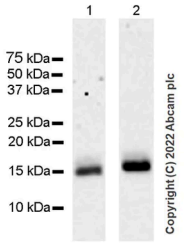
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HuT-78 (human Sezary syndrome cutaneous T lymphocyte) treated with 80nM TPA and 3uM Ionomycin for 5h, then add 300ng/ml BFA for another 4h (Red) / Untreated control (Green) cells labelling XCL1+XCL2 with ab302522 at 1/500 dilution (0.1ug) (Red) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry - Anti-XCL1+XCL2 antibody [EPR26181-30] (ab302522)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized HuT-78 (human Sezary syndrome cutaneous T lymphocyte) cells labelling XCL1+XCL2 with ab302522 at 1/1000 (0.432 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing increased cytoplasmic staining in HuT-78 cells treated with TPA (80 nM) and Ionomycin (3 uM) for 5 h, then add Brefeldin A (300ng/ml) for another 4 h is observed. ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). 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 2 ug/ml dilution.

Western blot - Anti-XCL1+XCL2 antibody [EPR26181-30] (ab302522)



XCL1+XCL2 Western blot staining using rabbit Anti-XCL1+XCL2 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
All lanes:
Western blot - Anti-XCL1+XCL2 antibody [EPR26181-30] (ab302522) at 1/500 dilution

Lane 1:
Human XCL1 recombinant protein at 10 ng

Lane 2:
Human XCL2 recombinant protein at 10 ng

Secondary

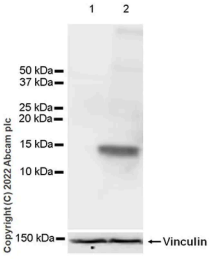
All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 12 kDa

Observed band size: 15 kDa

Exposure time: 15s

Western blot - Anti-XCL1+XCL2 antibody [EPR26181-30] (ab302522)



XCL1+XCL2 Western blot staining using rabbit Anti-XCL1+XCL2 antibody

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

The expression of XCL1 are upregulated in response to TPA and Ionomycin treatment (PMID:29474842, 32948687).

All lanes:
Western blot - Anti-XCL1+XCL2 antibody [EPR26181-30] (ab302522) at 1/500 dilution

Lane 1:
Untreated HuT-78 (human Sezary syndrome cutaneous T lymphocyte), whole cell lysate at 40 µg

Lane 2:
HuT-78 treated with 80 nM TPA and 3 uM Ionomycin for 5h, 300 ng/ml BFA was then added for additional 4h, whole cell lysate at 40 µg

Secondary

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

Predicted band size: 12 kDa

Observed band size: 15 kDa

Exposure time: 1s

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