abcam

ab318952

Anti-CD127 antibody [EPR26371-57]

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	EPR26371-57
Purification technique	Affinity purification Protein A
Concentration	0.516 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt (Intra)

Tested

Species	Transfected cell line - Mouse
Dilution info	1/5000
Notes	-

Expected

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

Flow Cyt

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Not recommended

Species	Transfected cell line - Mouse
Dilution info	-
Notes	-

IHC-Fr

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Not recommended

Species	Transfected cell line - Mouse
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Mouse, Transfected cell line - Mouse
Dilution info	-
Notes	-

Target data

See full target information Il7r

Function	Receptor for interleukin-7. Also acts as a receptor for thymic stromal lymphopoietin (TSLP).

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	CD127 also known as IL-7R alpha or IL-7Rα is a protein found on the surface of cells involved in key immune functions. The CD127 protein has an approximate mass of 55-60 kDa. It is a component of the interleukin-7 receptor which also includes the common gamma chain. You can find CD127 expressed on various immune cells like T cells B cells and dendritic cells. As a marker CD127 is an important indicator of T cell maturity and function. Researchers often target CD127 in studies using antibodies in assay formats like ELISA to measure its expression level and function.
Biological function summary	CD127 plays an important role in regulating lymphocyte development and survival. It is part of the IL-7R complex partnering with IL-7 for signal transduction that promotes cell proliferation and survival. This interaction is essential for the development and homeostasis of T cells and B cells. In the absence of proper CD127 signaling lymphocytes may suffer from poor survival impacting overall immune competence. The IL-7-CD127 interaction informs researchers about mechanisms of immune modulation and resilience.
Pathways	CD127 participates in the JAK/STAT signaling pathway which is pivotal for transmitting information from extracellular signals to the cell nucleus influencing gene expression. This pathway plays a vital role in immune cell response. When IL-7 binds to the IL-7R complex on CD127 it initiates a cascade that involves proteins like JAK1 and STAT5. These proteins mediate responses necessary for cell proliferation and differentiation within immune system networks.
Associated diseases and disorders	CD127 has implications in conditions like severe combined immunodeficiency (SCID) and autoimmune diseases. In SCID mutations or defects in CD127 cause impaired T cell development leading to compromised immune function. Additionally CD127 dysregulation can contribute to autoimmune disorders by affecting T regulatory cells creating an imbalance in immune response. Ocrevus a monoclonal antibody therapy used for multiple sclerosis indirectly relates to CD127 by targeting the B cells which rely on IL-7R signaling mechanisms for survival and function. Researchers continue to investigate CD127 to better understand its role in immune-related diseases.

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.

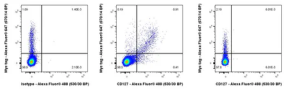
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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8 product images



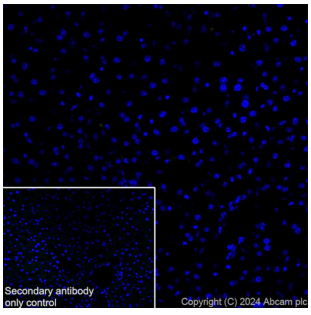
Flow Cytometry (Intracellular) - Anti-CD127 antibody [EPR26371-57] (ab318952)

CD127 Flow Cytometry (Intracellular) staining using rabbit Anti-CD127 antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 0.1% Tween-20 permeabilized Isotype Control (Left) / 293T (human embryonic kidney epithelial cell) transfected with a mouse Interleukin-7 receptor subunit alpha expression vector containing a myc-His-tag® (Middle) / 293T transfected with an empty expression vector containing a myc-His-tag® (Right). cells labelling CD127 with ab318952 at 1/5000 dilution (0.01ug) / Middle and Right (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

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

Cells were surface stained with ab318952. Fixed with 4% PFA for 10 min followed by intracellularly staining with anti-Myc tag conjugated to Alexa Fluor® 647.



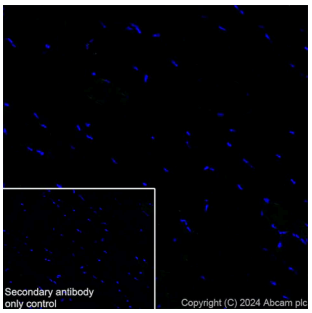
Immunohistochemistry (Frozen sections) - Anti-CD127 antibody [EPR26371-57] (ab318952)

CD127 Immunohistochemistry (Frozen sections) staining of Mouse liver (fresh frozen) using rabbit Anti-CD127 antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse liver (fresh frozen) tissue labeling CD127 with ab318952 at 1/50 (10.32 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green).

Negative control: confocal image showing no staining on mouse liver. The nuclear counterstain was DAPI (Blue). The section was incubated with ab318952 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

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



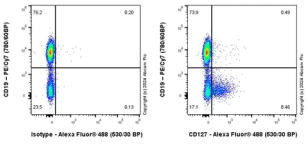
Immunohistochemistry (Frozen sections) - Anti-CD127 antibody [EPR26371-57] (ab318952)

CD127 Immunohistochemistry (Frozen sections) staining of Mouse skeletal muscle (fresh frozen) using rabbit Anti-CD127 antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse skeletal muscle (fresh frozen) tissue labeling CD127 with ab318952 at 1/50 (10.32 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green).

Negative control: confocal image showing no staining on mouse skeletal muscle. The nuclear counterstain was DAPI (Blue). The section was incubated with ab318952 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

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

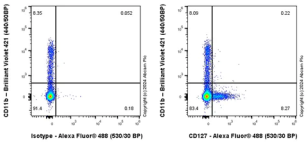


Flow Cytometry - Anti-CD127 antibody [EPR26371-57] (ab318952)

Flow cytometric analysis of Mouse spleen cell cells labelling CD127 with ab318952 at 1/50 dilution (1ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

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

Gated on viable cells.
Cells were co-stain with anti-mouse CD19 conjugated to PE/Cy7.



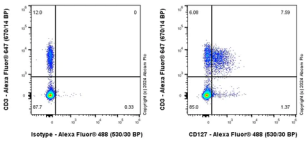
Flow Cytometry - Anti-CD127 antibody [EPR26371-57] (ab318952)

CD127 Flow Cytometry staining of Mouse spleen cell using rabbit Anti-CD127 antibody

Flow cytometric analysis of Mouse spleen cell cells labelling CD127 with ab318952 at 1/50 dilution (1ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

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

Gated on viable cells.
Cells were co-stained with anti-mouse CD11b conjugated to Brilliant Violet 421.

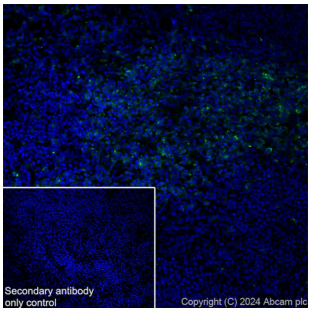


Flow Cytometry - Anti-CD127 antibody [EPR26371-57] (ab318952)

Flow cytometric analysis of Mouse spleen cell cells labelling CD127 with ab318952 at 1/50 dilution (1ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

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

Gated on viable cells.
Cells were co-stained with anti-mouse CD3 conjugated to Alexa Fluor®647.

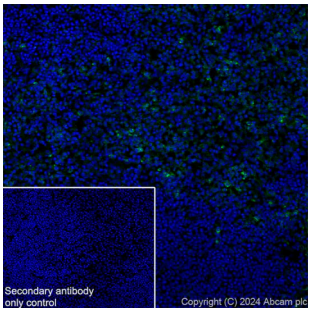


Immunohistochemistry (Frozen sections) - Anti-CD127 antibody [EPR26371-57] (ab318952)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse spleen (fresh frozen) tissue labeling CD127 with ab318952 at 1/50 (10.32 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green).

Confocal image showing positive staining on mouse spleen. The nuclear counterstain was DAPI (Blue). The section was incubated with ab318952 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

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



Immunohistochemistry (Frozen sections) - Anti-CD127 antibody [EPR26371-57] (ab318952)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse lymph node (fresh frozen) tissue labeling CD127 with ab318952 at 1/50 (10.32 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green).

Confocal image showing positive staining on mouse lymph node. The nuclear counterstain was DAPI (Blue). The section was incubated with ab318952 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

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

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