abcam

ab303476

Alexa Fluor® 647 Anti-CD127 antibody [EPR22835-249]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 647
Excitation/Emission	Ex: 650nm, Em: 665nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR22835-249
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/500
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	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, Store in the dark

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.

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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.

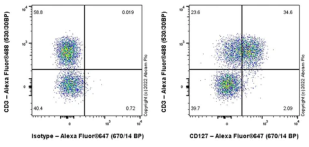
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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

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1 product image



Flow Cytometry - Alexa Fluor® 647 Anti-CD127 antibody [EPR22835-249] (ab303476)

Flow Cytometry analysis of human peripheral blood mononuclear cell (PBMC) stained for CD127 using ab303476 at a 1/500 dilution (0.1 µg) (Right panel) compared to Rabbit IgG monoclonal [EPR25A] - Isotype Control (Alexa Fluor® 647) (ab199093) (Left panel). Gated on viable cells. Expression of CD127 is observed on CD3 positive cells (PMID: 21355093).

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