abcam

ab303594

Alexa Fluor® 647 Anti-CD58 antibody [EPR24012-147]

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	EPR24012-147
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	1/2500
Notes	-

Target data

See full target information CD58

Function	Ligand of the T-lymphocyte CD2 glycoprotein. This interaction is important in mediating thymocyte interactions with thymic epithelial cells, antigen-independent and -dependent interactions of T-lymphocytes with target cells and antigen-presenting cells and the T-lymphocyte rosetting with erythrocytes. In addition, the LFA-3/CD2 interaction may prime response by both the CD2+ and LFA-3+ cells.

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	CD58 also known as lymphocyte function-associated antigen 3 (LFA-3) is a glycoprotein with a molecular mass of approximately 60 kDa. It is present on the surface of various cell types including antigen-presenting cells epithelial cells and some other leukocytes. This protein serves as a ligand for CD2 which is expressed on T cells and natural killer cells. Through its interaction with CD2 CD58 mediates cell adhesion and plays a role in immunological synapse formation which is essential for effective immune responses.
Biological function summary	Lymphocyte function-associated antigen 3 acts as a significant participant in the immune system. It plays a role in T cell activation and facilitates interactions between T cells and antigen-presenting cells. CD58 forms part of a complex network of cell surface proteins that enhances immune surveillance and response. Its role highlights its importance in adaptive immunity by promoting cell-to-cell communication and activation.
Pathways	CD58 participates in the cell adhesion pathways. It interacts closely with CD2 which is involved in the activation and signaling of T cells. Through this interaction CD58 plays roles in pathways like T cell receptor signaling and immune response. It enhances cell-cell adhesion helping T cells maintain their position during immune surveillance and activation.
Associated diseases and disorders	CD58 relates to conditions such as autoimmune diseases and certain cancers. In autoimmune disorders aberrant expression or function of CD58 may contribute to inappropriate immune activation leading to tissue damage. In cancer CD58 alterations can affect tumor immune evasion influencing how the immune system recognizes and attacks cancer cells. In multiple sclerosis an autoimmune disease the interaction between CD58 and CD2 has been studied providing insights into its role in disease mechanisms.

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

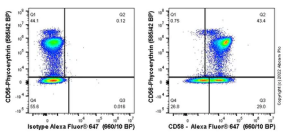
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Flow Cytometry - Alexa Fluor® 647 Anti-CD58 antibody [EPR24012-147] (ab303594)

CD58 Flow Cytometry staining of human peripheral blood mononuclear cells using rabbit Anti-CD58 antibody

Flow cytometry staining of human peripheral blood mononuclear cells (PBMCs) with ab303594 (right) or Rabbit IgG (monoclonal) Alexa Fluor® 647 (ab199093) isotype (left). PBMCs were incubated for 30 min on ice in 1x PBS containing 10µg/ml human IgG and 10% normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab303594) or Rabbit IgG (monoclonal) Alexa Fluor® 647 (ab199093) isotype (100 µl at 0.2µg/ml (1/2500)) for 30 min on ice. The cells were simultaneously stained with CD56.

Acquisition of >30000 events were collected using a 40 mW Red laser (638 nm) and 660/10 bandpass filter. Events were gated on live single cells.

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