abcam

ab317062

Alexa Fluor® 488 Anti-CLEC12A antibody [EPR26967-58]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 488
Excitation/Emission	Ex: 495nm, Em: 519nm
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	EPR26967-58
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 CLEC12A

Function

Myeloid inhibitory C-type lectin receptor that acts as a negative regulator of myeloid cell activation (PubMed:14739280, PubMed:15238421, PubMed:16239426, PubMed:34234773, PubMed:38367667, PubMed:38386511, PubMed:39143217). Myeloid cell inhibition is required to limit proinflammatory pathways and protect against excessive inflammation (By similarity). Specifically recognizes and binds various structures, such as neutrophil extracellular traps (NETs) or monosodium urate crystals (PubMed:38367667, PubMed:38386511, PubMed:39143217). Also acts as a pattern-recognition receptor for pathogen-associated molecules, such as plasmodium hemozoin or mycobacterial micolic acid (PubMed:31269448, PubMed:36542980). Ligand-binding induces phosphorylation of its ITIM motif, followed by recruitment of tyrosine-protein phosphatases PTPN6 and PTPN11, which counteract tyrosine-protein kinase SYK, thereby preventing myeloid cell activation (PubMed:14739280, PubMed:16239426, PubMed:34234773). Acts as a pattern-recognition receptor for NETs in neutrophils: specifically recognizes DNA in NETs, leading to inhibit neutrophil activation and limit further NET formation (PubMed:39143217). This regulation is essential for controlling key neutrophil responses and limit NET-mediated inflammatory conditions (By similarity). Also recognizes dead cells by acting as a receptor for monosodium urate crystals, leading to down-regulate neutrophil activation (PubMed:38367667, PubMed:38386511). Binding to monosodium urate crystals also promotes the type I interferon response (By similarity). Acts as an inhibitor of natural killer (NK) cell cytotoxicity (PubMed:15238421). Also acts as an inhibitor of dendritic cell maturation in an IL10-dependent manner (PubMed:16239426).

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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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

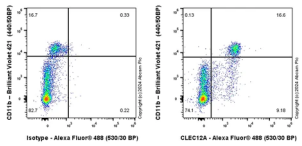
We do not recommend this combination. It is not covered by our product promise.

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.

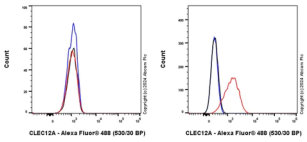
3 product images



Flow Cytometry - Alexa Fluor® 488 Anti-CLEC12A antibody [EPR26967-58] (ab317062)

Flow cytometric analysis of Human PBMC (human peripheral blood mononuclear cell) cells labelling CLEC12A with ab317062 at 1/500 dilution (0.1ug)/ Right compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Alexa Fluor® 488) (ab199091) / Left isotype control.

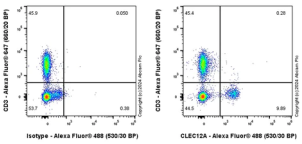
Gated on viable cells. Cells were co-stained with anti-CD11b conjugated to BV421.



Flow Cytometry - Alexa Fluor® 488 Anti-CLEC12A antibody [EPR26967-58] (ab317062)

Flow cytometric analysis of K-562 (human chronic myelogenous leukemia lymphoblast, Left) / U-937 (human histiocytic lymphoma monocyte, Right) cells labelling CLEC12A with ab317062 at 1/500 dilution (0.1ug)/Red compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Alexa Fluor® 488) (ab199091) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Gated on viable cells. Negative control: K-562.



Flow Cytometry - Alexa Fluor® 488 Anti-CLEC12A antibody [EPR26967-58] (ab317062)

Flow cytometric analysis of Human PBMC (human peripheral blood mononuclear cell) cells labelling CLEC12A with ab317062 at 1/500 dilution (0.1ug)/ Right compared with a Rabbit IgG monoclonal [EPR25A] - Isotype Control (Alexa Fluor® 488) (ab199091) / Left isotype control.

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

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