abcam

ab215975

Anti-IL-10 antibody [EPR1114] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR1114
Purification technique	Affinity purification Protein A
Specificity	This antibody is not suitable for detection of endogenous expression of IL-10 in WB.
Dissociation constant	3.7 x 10^{-11} M
Concentration	1.009 - 1.082 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Recombinant full length protein - Human
Dilution info	-
Notes	This application will not work using endogenous samples. It reacts only with the recombinant fragment.

Not recommended

Species	Human
Dilution info	-
Notes	This application will not work using endogenous samples. It reacts only with the recombinant fragment.

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Recombinant full length protein - Human
Dilution info	-
Notes	-

Target data

See full target information IL10

Function

Major immune regulatory cytokine that acts on many cells of the immune system where it has profound anti-inflammatory functions, limiting excessive tissue disruption caused by inflammation. Mechanistically, IL10 binds to its heterotetrameric receptor comprising IL10RA and IL10RB leading to JAK1 and STAT2-mediated phosphorylation of STAT3 (PubMed:16982608). In turn, STAT3 translocates to the nucleus where it drives expression of anti-inflammatory mediators (PubMed:18025162). Targets antigen-presenting cells (APCs) such as macrophages and monocytes and inhibits their release of pro-inflammatory cytokines including granulocyte-macrophage colony-stimulating factor /GM-CSF, granulocyte colony-stimulating factor/G-CSF, IL-1 alpha, IL-1 beta, IL-6, IL-8 and TNF (PubMed:11564774, PubMed:1940799, PubMed:7512027). Also interferes with antigen presentation by reducing the expression of MHC-class II and co-stimulatory molecules, thereby inhibiting their ability to induce T cell activation (PubMed:8144879). In addition, controls the inflammatory response of macrophages by reprogramming essential metabolic pathways including mTOR signaling (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab215975 is the carrier-free version of ab133575.

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.

Conjugation ready
Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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

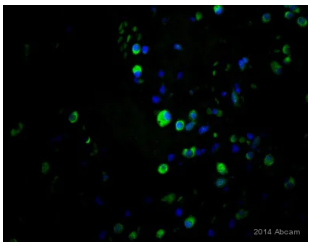
We do not recommend this combination. It is not covered by our product promise.

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

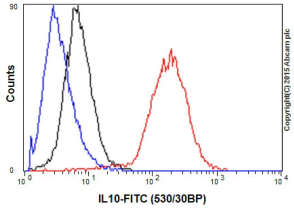


This image is courtesy of an anonymous customer review

Immunocytochemistry/ Immunofluorescence - Anti-IL-10 antibody [EPR1114] - BSA and Azide free (ab215975)

IL-10 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-IL-10 antibody

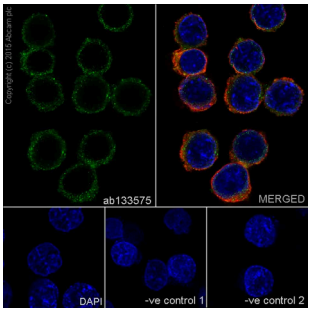
Unpurified ab133575 staining IL10 in human peripheral blood mononuclear cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Saponin in PBS and blocked with 4% BSA for 30 minutes at 25°C. Samples were incubated with primary antibody (1/100 in blocking buffer) for 16 hours at 4°C. An Alexa Fluor® 488-conjugated goat anti-rabbit IgG polyclonal (1/100) was used as the secondary antibody.
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133575).



Flow Cytometry (Intracellular) - Anti-IL-10 antibody [EPR1114] - BSA and Azide free (ab215975)

IL-10 Flow Cytometry (Intracellular) staining using rabbit Anti-IL-10 antibody

Overlay histogram showing HeLa cells fixed in 4% PFA and stained with purified ab133575 at a dilution of 1 in 300 (red line). The secondary antibody used was FITC goat anti-rabbit at a dilution of 1 in 500. Rabbit monoclonal IgG was used as an isotype control (black line) and cells incubated in the absence of both primary and secondary antibody were used as a negative control (blue line). This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133575).

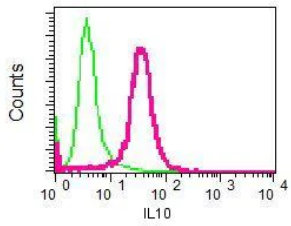


Immunocytochemistry/ Immunofluorescence - Anti-IL-10 antibody [EPR1114] - BSA and Azide free (ab215975)

IL-10 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-IL-10 antibody

Immunofluorescence staining of Molt-4 cells with purified ab133575 at a working dilution of 1/250, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit (ab150077), used at a dilution of 1/1000. ab7291, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with ab150120 (Alexa Fluor® 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified ab133575 was used at a dilution of 1/500 followed by an Alexa Fluor® 594 goat anti-mouse antibody (ab150120) at a dilution of 1/500. For negative control 2, ab7291 (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor® 488 goat anti-rabbit antibody (ab150077) at a dilution of 1/400.

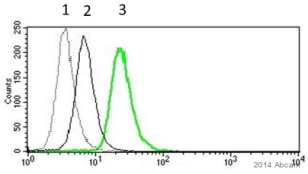
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Flow Cytometry (Intracellular) - Anti-IL-10 antibody [EPR1114] - BSA and Azide free (ab215975)

IL-10 Flow Cytometry (Intracellular) staining using rabbit Anti-IL-10 antibody

Intracellular Flow Cytometry analysis of permeabilized HeLa cells labelling IL10 using unpurified ab133575 at a 1/100 dilution (red) or a control rabbit IgG antibody (green).
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133575).

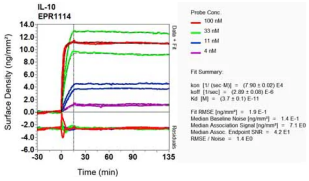


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Flow Cytometry (Intracellular) - Anti-IL-10 antibody [EPR1114] - BSA and Azide free (ab215975)

Intracellular flow cytometric analysis of human PBMCs (peripheral blood mononuclear cells) treated with PHA labeling IL10 with ab133575 at 1/100 dilution (green), followed by Goat anti-rabbit Alexa Fluor® 488.
1 (dashed line) = isotype control, 2 (black line) = PBMCs untreated, 3 (green line) = PBMCs treated with PHA.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab133575).



OI-RD Scanning - Anti-IL-10 antibody [EPR1114] - BSA and Azide free (ab215975)

We have systematically measured KD (the equilibrium dissociation constant between the antibody and its antigen), of more than 840 recombinant antibodies to assess not only their individual KD values but also to see the average affinity of antibody. Based on the comparison with published literature values for mouse monoclonal antibodies, Recombinant antibodies appear to be on average 1-2 order of magnitude higher affinity.

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