abcam

ab133575

Anti-IL-10 antibody [EPR1114]

Anti-IL-10 antibody [EPR1114] (ab133575) is a rabbit monoclonal antibody detecting IL-10 in **Western Blot, Flow Cytometry (Intra), ICC/IF**. Suitable for **Human**.

- Biophysical QC for unrivalled batch-batch consistency
- Over 10 publications

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	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	1.546 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	1/1000 - 1/10000
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.

IHC-P

Not recommended

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

ICC/IF

Tested

Species	Human
Dilution info	1/50 - 1/250
Notes	-

Not recommended

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

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	ab172730 - 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	-

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	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	Stable for 12 months at -20°C

Notes

What is this antibody validated in?
Anti-IL-10 antibody [EPR1114] (ab133575) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Immunocytochemistry/immunofluorescence (ICC/IF) in Human samples.

What is the molecular weight of IL-10?
Anti-IL-10 [EPR1114] (ab133575) specifically detects a band for IL-10 (UniProt: P22301) at a molecular weight of 20kDa.

Trusted by the scientific community
Anti-IL-10 [EPR1114] (ab133575) was first used in a scientific publication in 2012 and has been cited over 10 times in peer-reviewed journals.

Other related products
We have a range of other formats of antibody clone [EPR1114] also available for your convenience: ab133575, PE - ab209930, Carrier free - ab215975, PerCP - ab220518, APC - ab221277, Carrier free - ab246688, Alexa Fluor® 647 - ab305044

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.

Trial sizes available!
Test your antibody or perform pre-screening before committing to a larger quantity. Sold in 20µl. Discover our selection of trial-size antibodies.

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.

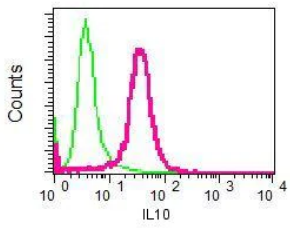
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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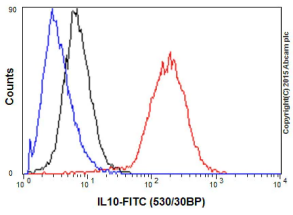
7 product images



Flow Cytometry (Intracellular) - Anti-IL-10 antibody [EPR1114] (ab133575)

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

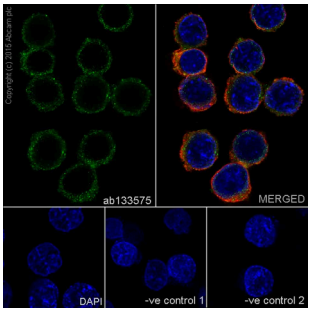
Intracellular Flow Cytometry analysis of permeabilized HeLa cells labelling IL-10 using unpurified ab133575 at a 1/100 dilution (red) or a control rabbit IgG antibody (green).



Flow Cytometry (Intracellular) - Anti-IL-10 antibody [EPR1114] (ab133575)

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

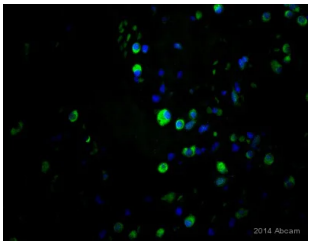
Overlay histogram showing HeLa cells fixed in 4% PFA and stained with purified ab133575 at a dilution of 1 in 300 (red line). The secondary antibody used was FITC goat anti-rabbit at a dilution of 1 in 500. Rabbit monoclonal IgG was used as an isotype control (black line) and cells incubated in the absence of both primary and secondary antibody were used as a negative control (blue line).



Immunocytochemistry/ Immunofluorescence - Anti-IL-10 antibody [EPR1114] (ab133575)

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.

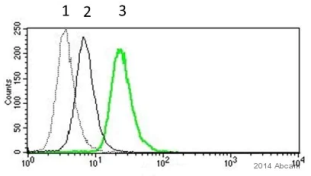


This image is courtesy of an anonymous customer review

Immunocytochemistry/ Immunofluorescence - Anti-IL-10 antibody [EPR1114] (ab133575)

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

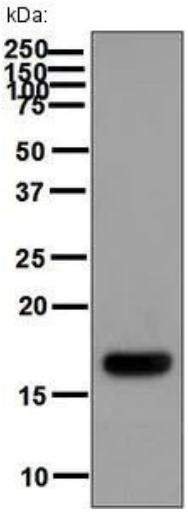
Unpurified ab133575 staining IL-10 in human peripheral blood mononuclear cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Saponin in PBS and blocked with 4% BSA for 30 minutes at 25°C. Samples were incubated with primary antibody (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 image is courtesy of an anonymous customer review.

Flow Cytometry (Intracellular) - Anti-IL-10 antibody [EPR1114] (ab133575)

Intracellular flow cytometric analysis ofhuman PBMCs (peripheral blood mononuclear cells)treated with PHA labeling IL-10 with ab133575 at 1/100 dilution (green), followed by Goat anti-rabbit Alexa Fluorr® 488.
1 (dashed line) = isotype control, 2 (black line) = PBMCs untreated, 3 (green line) = PBMCs treated with PHA.



Western blot - Anti-IL-10 antibody [EPR1114] (ab133575)

All lanes:
Western blot - Anti-IL-10 antibody [EPR1114] (ab133575) at 1/1000 dilution

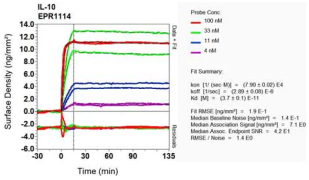
All lanes:
Recombinant IL-10 protein at 0.005 µg

Secondary

All lanes:
Standard HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 20 kDa

Observed band size: 18 kDa



OI-RD Scanning - Anti-IL-10 antibody [EPR1114] (ab133575)

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'.