abcam

ab324290

Anti-IL-10 antibody [RM1325]

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	Multiclonal
Immunogens	The exact immunogen used to generate this antibody is proprietary information.
Clone number	RM1325
Purification technique	Affinity purification Protein A
Concentration	0.505 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

I-ELISA

Tested

Species	Recombinant full length protein - Mouse
Dilution info	31.25 ng/mL
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Rat, Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/5000
Notes	-

Not recommended

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

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Not recommended

Species	Rat, Recombinant full length protein - Mouse, Human

Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Not recommended

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

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

Not recommended

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

IHC-P

Not recommended

Species	Human, Mouse, Rat, Recombinant full length protein - Mouse
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. In turn, STAT3 translocates to the nucleus where it drives expression of anti-inflammatory mediators. 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. 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 (By similarity). In addition, controls the inflammatory response of macrophages by reprogramming essential metabolic pathways including mTOR signaling (By similarity) (PubMed:28473584).

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

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 recombinant multiclonals?
Recombinant multiclonals are a mixture of recombinant antibodies co-expressed from a library of heavy and light chains. They offer several advantages including:

- The sensitivity of polyclonal antibodies by recognising multiple epitopes
- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

View our range of recombinant multiclonal 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

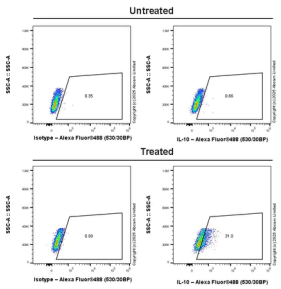
We do not recommend this combination. It is not covered by our product promise.

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.

5 product images

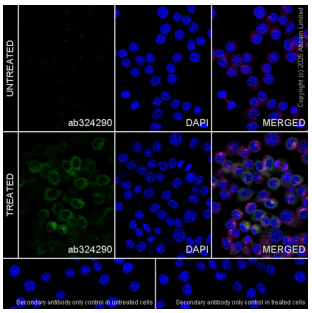


Flow Cytometry (Intracellular) - Anti-IL-10 antibody [RM1325] (ab324290)

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

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) treated with Lipopolysaccharides (100ng/ml) for 4 hours add Brefeldin A (1ug/ml) for 3 hours (Lower left and lower right) / Untreated RAW264.7 (Upper left and upper right) cells labelling IL-10 with ab324290 at 1/5000 dilution (0.01ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-IL-10 antibody [RM1325] (ab324290)

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

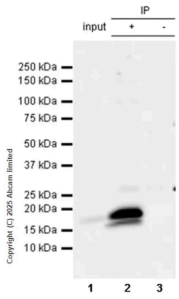
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) cells labelling IL-10 with ab324290 at 1/50 (9.74 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/ab150081 1000 2ug/ml dilution (Green).

Confocal image showing cytoplasmic staining in RAW 264.7 cell line treated with Lipopolysaccharides(100ng/ml) for 4hours add Brefeldin A(1ug/ml) for 3hours (shown in green). The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/ab195889 200 2.5ug/ml dilution (Magenta). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/ab150081 1000 2ug/ml dilution.

Immunoprecipitation - Anti-IL-10 antibody [RM1325] (ab324290)



IL-10 was immunoprecipitated from 0.35 mg RAW 264.7 treated with 100ng/mL LPS for 4h add 1ug/ml BFA for 3h whole cell lysate with ab324290 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab324290 at 1/1000 dilution.

Blocking and dilution buffer and concentration: 5% NFDM/TBST

All lanes:
Immunoprecipitation - Anti-IL-10 antibody [RM1325] (ab324290) at 1/1000 dilution

Lane 1:
RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) treated with 100ng/mL LPS for 4h add 1ug/ml BFA for 3h whole cell lysate

Lane 2:
ab324290 IP in RAW 264.7 treated with 100ng/mL LPS for 4h add 1ug/ml BFA for 3h whole cell lysate

Lane 3:
Rabbit monoclonal IgG (ab172730) instead of ab324290 in RAW 264.7 treated with 100ng/mL LPS for 4h add 1ug/ml BFA for 3h whole cell lysate

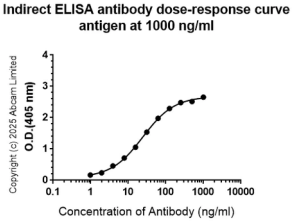
Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Observed band size: 20 kDa

Exposure time: 41s

Indirect ELISA - Anti-IL-10 antibody [RM1325] (ab324290)

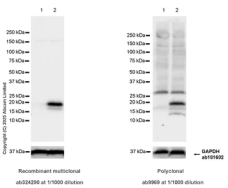


Indirect ELISA analysis of ab324290 at 1000-0 ng/ml. The Secondary antibody used was Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1:2500 dilution dilution.

Antigen: Mouse IL-10.

Antigen concentration: 1000 ng/ml

Western blot - Anti-IL-10 antibody [RM1325] (ab324290)



IL-10 Western blot staining using rabbit Anti-IL-10 antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The expression of IL-10 is upregulated in response to LPS and BFA treatment (PMID: 31447835).

The band beneath the target band (14 kDa) is expected to be cleavaged fragment (PMID: 20949050).

Recombinant multiclonal ab324290 showed stronger specificity than polyclonal ab9969.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

All lanes:
Western blot - Anti-IL-10 antibody [RM1325] (ab324290) at 1/1000 dilution

Lane 1:
Untreated RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage), whole cell lysate at 40 µg

Lane 2:
RAW 264.7 treated with 100ng/ml LPS for 4 hours, 1ug/ml BFA was then added for additional 3 hours, whole cell lysate at 40 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 20 kDa, 36 kDa

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