abcam

ab310329

Anti-IL-10 antibody [EPR27280-88]

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	EPR27280-88
Purification technique	Affinity purification Protein A
Specificity	Interleukin-10 (IL-10) is an anti-inflammatory cytokine, produced mainly by monocytes/macrophages and regulatory T-cells. The expression of IL-10 is minimal in unstimulated tissues (PMID: 22438968). When performing Western Blot (WB), ensure to add appropriate treatments such as LPS and BFA to induce and detect IL-10 expression in the RAW 264.7 cell line.
Concentration	0.507 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Mouse

Dilution info	1/1000
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/500
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human, Rat, Mouse
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Mouse, Human, Rat
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	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	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 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.

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

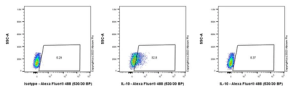
We do not recommend this combination. It is not covered by our product promise.

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.

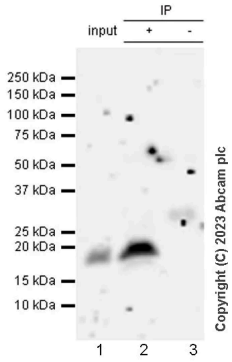
Full details and terms and conditions can be found here:
Terms & Conditions.

4 product images



Flow Cytometry (Intracellular) - Anti-IL-10 antibody [EPR27280-88] (ab310329)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Isotype (Left) / RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) treated with 100ng/ml LPS for 6h and then add 300ng/ml BFA for 3h (middle) / untreated RAW 264.7 (Right) cells labelling IL-10 with ab310329 at 1/500 dilution (0.1 ug)/Right (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-IL-10 antibody [EPR27280-88] (ab310329)

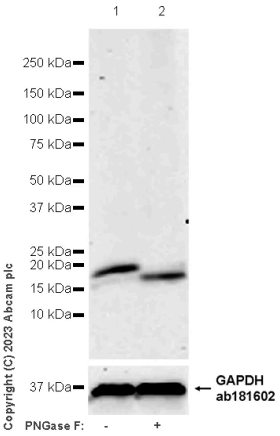
IL-10 was immunoprecipitated from 0.35 mg RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) treated with 100 ng/mL LPS for 6 hours, 300ng/mL Brefeldin A was then added for additional 3 hours whole cell lysate with ab310329 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab310329 at 1/1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution. Lane 1: RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) treated with 100 ng/mL LPS for 6 hours, 300ng/mL Brefeldin A was then added for additional 3 hours whole cell lysate Lane 2: ab310329 IP in RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) treated with 100 ng/mL LPS for 6 hours, 300ng/mL Brefeldin A was then added for additional 3 hours whole cell lysate Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab310329 in RAW264.7 treated with 100 ng/mL LPS for 6 hours, 300ng/mL Brefeldin A was then added for additional 3 hours whole cell lysate Blocking and dilution buffer and concentration: 5% NFDM/TBST.
All lanes:
Immunoprecipitation - Anti-IL-10 antibody [EPR27280-88] (ab310329) at 1/30 dilution

All lanes:
RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) treated with 100 ng/mL LPS for 6 hours, 300ng/mL Brefeldin A was then added for additional 3 hours whole cell lysate

Secondary

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

Exposure time: 3min



Western blot - Anti-IL-10 antibody [EPR27280-88] (ab310329)

Blocking and diluting buffer and concentration: 5% NFDM/TBST. The weaker band observed at 15kDa is the deglycosylated form of IL-10. In western blot, anti-GAPDH antibody (ab181602) loading control staining at 1/200000 dilution.
All lanes:
Western blot - Anti-IL-10 antibody [EPR27280-88] (ab310329) at 1/1000 dilution

Lane 1:
Untreated RAW 264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) treated with /mL LPS for 6 hours, 300ng/mL Brefeldin A was then added for additional 3 hours whole cell lysate at 20 µg

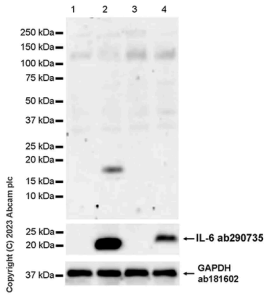
Lane 2:
RAW264.7 treated with /mL LPS for 6 hours, 300ng/mL Brefeldin A was then added for additional 3 hours whole cell lysate treated with N-glycosidase F at 20 µg

Secondary

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

Observed band size: 18 kDa

Exposure time: 3min



Western blot - Anti-IL-10 antibody [EPR27280-88] (ab310329)

Blocking and diluting buffer and concentration: 5% NFDM/TBST. The expression of IL-10 is upregulated in response to LPS in treated RAW 264.7 (PMID: 23012430, 15218058) but not in non-differentiated NIH/3T3 cells. In western blot, anti-IL-6 antibody (ab290735) staining at 1/1000 dilution. Anti-GAPDH antibody (ab181602) loading control staining at 1/200000 dilution.
All lanes:
Western blot - Anti-IL-10 antibody [EPR27280-88] (ab310329) at 1/1000 dilution

Lane 1:
Untreated RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate at 20 µg

Lane 2:
RAW264.7 treated with 100 ng/mL LPS for 6 hours, 300ng/mL Brefeldin A was then added for additional 3 hours whole cell lysate at 20 µg

Lane 3:
Untreated NIH/3T3 (mouse embryonic fibroblast) whole cell lysate at 20 µg

Lane 4:
NIH/3T3 treated with 100 ng/mL LPS for 6 hours, 300ng/mL Brefeldin A was then added for additional 3 hours whole cell lysate at 20 µg

Secondary

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

Predicted band size: 20 kDa

Observed band size: 18 kDa

Exposure time: 3min

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