abcam

ab263954

Anti-IL-22 antibody [EPR20211-49] - 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	EPR20211-49
Purification technique	Affinity purification Protein A
Concentration	1.027 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	-

Notes	-

WB

Not recommended

Species	Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information IL22

Function	Cytokine that plays a critical role in modulating tissue responses during inflammation (PubMed:17204547). Plays an essential role in the regeneration of epithelial cells to maintain barrier function after injury and for the prevention of further tissue damage (PubMed:17204547). Unlike most of the cytokines, has no effect on immune cells. Signals through a heterodimeric receptor composed of two subunits, the specific receptor IL22RA1 which is present on non-immune cells in many organs and the shared subunit IL10RB (PubMed:10875937, PubMed:18599299). Ligation of IL22RA1 with IL22 induces activation of the tyrosine kinases JAK1 and TYK2, which in turn activates STAT3. In turn, promotes cell survival and proliferation through STAT3, ERK1/2 and PI3K/AKT pathways (PubMed:25793261, PubMed:31311100). Promotes phosphorylation of GSK3B at 'Ser-9' and CTTN (By similarity). Promotes epithelial cell spreading (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

ab263954 is the carrier-free version of ab227033.

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

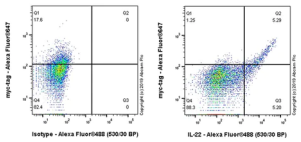
We do not recommend this combination. It is not covered by our product promise.

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.

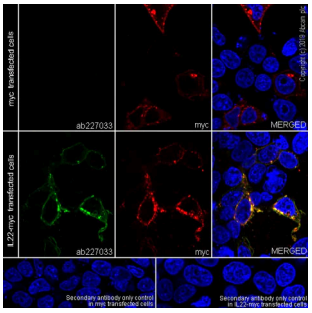
4 product images



Flow Cytometry (Intracellular) - Anti-IL-22 antibody [EPR20211-49] - BSA and Azide free (ab263954)

IL-22 Flow Cytometry (Intracellular) staining using rabbit Anti-IL-22 antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized 293T (human embryonic kidney epithelial cell) transfected with myc-tagged IL-22 expression vector cells labelling IL-22 with ab227033 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730)isotype control (left)and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution 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 (ab227033).

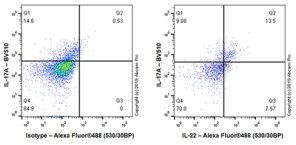


Immunocytochemistry/ Immunofluorescence - Anti-IL-22 antibody [EPR20211-49] - BSA and Azide free (ab263954)

IL-22 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-IL-22 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized 293T (human embryonic kidney epithelial cell) cells labelling IL-22 with ab227033 at 1/100 dilution, followed by ab150077 AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic and staining in 293T cells transfected with myc-tagged IL-22 expression vector. The vector also contains a PDGFR transmembrane domain. is observed. ab223894 Anti-Myc tag antibody [9E10] (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The Nuclear counterstain was DAPI (Blue).
Secondary antibody only control: Secondary antibody is ab150077 AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.

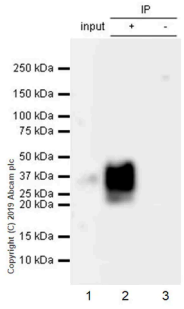
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227033).



Flow Cytometry (Intracellular) - Anti-IL-22 antibody [EPR20211-49] - BSA and Azide free (ab263954)

IL-22 Flow Cytometry (Intracellular) staining using rabbit Anti-IL-22 antibody

Intracellular flow cytometric analysis of 2% paraformaldehyde fixed 0.1% Tween-20 permeabilized Th17 polarized human PBMC treated with 50ng/ml PMA (ab120297), 200ng/ml Ionomycin calcium (ab120116) and 300ng/ml BFA (ab193369) for 4h cells labelling IL-22 with ab227033 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG (ab172730) Left isotype control (left)and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution 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 (ab227033).



Immunoprecipitation - Anti-IL-22 antibody [EPR20211-49] - BSA and Azide free (ab263954)

IL-22 was immunoprecipitated from 0.35 mg 293T (human embryonic kidney epithelial cell) transfected with myc-tagged IL-22 expression vector whole cell lysate with ab227033 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab227033 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.
Lane 1: 293T (human embryonic kidney epithelial cell) transfected with myc-tagged IL-22 expression vector whole cell lysate 10ug

Lane 2: ab227033 IP in 293T transfected with myc-tagged IL-22 expression vector whole cell lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab227033 in 293T transfected with myc-tagged IL-22 expression vector whole cell lysate

The vector containing a PDGFR transmembrane domain (~6 kDa). The molecular weight observed is consistent with what has been described in the literature (PMID: 26059044)

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

Exposure time: 20 seconds

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab227033).
All lanes:
Immunoprecipitation - Anti-IL-22 antibody [EPR20211-49] (ab227033)

Predicted band size: 20 kDa

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