abcam

ab203211

Anti-IL22 RA2/IL-22BP antibody

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.4 Preservative: 0.02% Proclin 300 Constituents: 50% Glycerol (glycerin, glycerine), 48.98% TBS, 1X, 1% BSA
Form	Liquid
Clonality	Polyclonal
Immunogen	Synthetic Peptide within Human IL22RA2 aa 150-250 conjugated to Keyhole Limpet Haemocyanin. The exact immunogen used to generate this antibody is proprietary information. Database link Q969J5
Purification technique	Affinity purification Protein A
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	1/20 - 1/100
Notes	ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

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

Predicted

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/100 - 1/1000
Notes	-

Species	Rat
Dilution info	1/100 - 1/1000
Notes	-

Predicted

Species	Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Mouse
Dilution info	1/50 - 1/500
Notes	(or 1/50 - 1/200 using a fluorescent secondary antibody).

Expected

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

Predicted

Species	Human
Dilution info	-
Notes	-

Target data

See full target information IL22RA2

Function	Isoform 2 is a receptor for IL22. Binds to IL22, prevents interaction with the functional IL-22R complex and blocks the activity of IL22 (in vitro). May play an important role as an IL22 antagonist in the regulation of inflammatory responses. Isoform 1 may play a role in establishing and maintaining successful pregnancy.

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

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	IL22 RA2 also known as IL-22BP (IL-22 binding protein) acts as a soluble decoy receptor for IL-22 and it plays a role in modulating IL-22 activity. IL-22 promotes the survival and innate immunity of epithelial cells. IL22 RA2 binds IL-22 with high affinity preventing it from interacting with its membrane receptor IL22R1. This protein is approximately 27 kDa in size and is expressed mainly in the placenta spleen and skin. IL22 RA2 does not get anchored to the cell membrane which allows it to regulate IL-22 activity distantly from the site of its production.
Biological function summary	IL22 RA2 is involved in dampening the pro-inflammatory effects of IL-22. IL-22 is part of the interleukin-10 (IL-10) cytokine family and IL22 RA2 adjusts the balance of IL-22 activity within tissue microenvironments. By neutralizing IL-22 IL22 RA2 reduces cytokine signaling that would lead to excessive inflammation. Though it does not form part of a larger receptor complex on the cell surface its role is significant in controlling the spread of IL-22 mediated signals in tissues prone to inflammation.
Pathways	IL22 RA2 influences the IL-22/STAT3 signaling pathway which is central in managing inflammatory responses and maintaining epithelial barrier functions. IL22 RA2 inhibits IL-22 induced STAT3 phosphorylation effectively blocking downstream pathway activation. Another related protein in this signaling route is IL22R1 which when not bound by IL22 RA2 forms a receptor complex with IL10R2 to mediate the effects of IL-22 in target tissues.
Associated diseases and disorders	IL22 RA2 has been linked to inflammatory bowel disease (IBD) and psoriasis. These conditions show deregulation of IL-22 activity where IL22 RA2 plays a role in modulating the inflammatory environment. By binding IL-22 IL22 RA2 affects the IL-22/IL22R1 axis reducing exacerbation of chronic inflammation seen in these diseases. Understanding its interaction with IL-22 can aid in the development of targeted therapies for managing inflammation in conditions such as IBD and psoriasis.

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

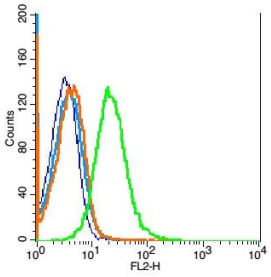
We do not recommend this combination. It is not covered by our product promise.

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.

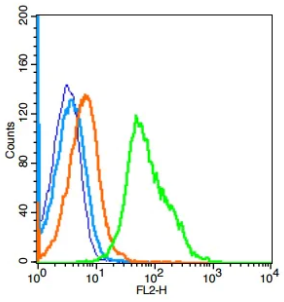
5 product images



Flow Cytometry - Anti-IL22 RA2/IL-22BP antibody (ab203211)

IL22 RA2/IL-22BP Flow Cytometry staining using rabbit Anti-IL22 RA2/IL-22BP antibody

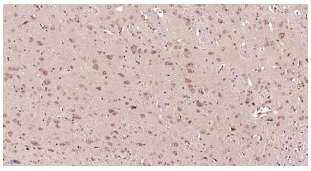
Flow Cytometry analysis of mouse spleen cells labeling IL22 RA2 / IL-22BP with ab203211 at 1/200, followed by incubation with a goat anti-rabbit PE conjugated secondary antibody (green). Cells were fixed with 2% PFA (10min at room temperature) and then permeabilized with 90% ice-cold methanol for 30min on ice. The cells were then incubated in 2% BSA + 10% goat serum to block non-specific protein-protein interactions for 15 min at room temperature. Dark blue represents control cells, secondary only control in shown in light blue and isotype control in orange.



Flow Cytometry - Anti-IL22 RA2/IL-22BP antibody (ab203211)

IL22 RA2/IL-22BP Flow Cytometry staining using rabbit Anti-IL22 RA2/IL-22BP antibody

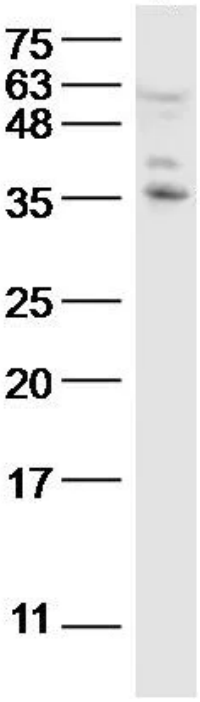
Flow Cytometry analysis of Mouse splenocytes labeling IL22 RA2 / IL-22BP with ab203211 at 1/100, followed by incubation with a PE conjugated secondary antibody (green). Blue represents control cells, secondary only control in shown in light blue and isotype control in orange.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IL22 RA2/IL-22BP antibody (ab203211)

IL22 RA2/IL-22BP Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-IL22 RA2/IL-22BP antibody

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Mouse brain tissue labeling IL22 RA2 / IL-22BP with ab203211 at 1/200 dilution, followed by conjugation to the secondary antibody and DAB staining.



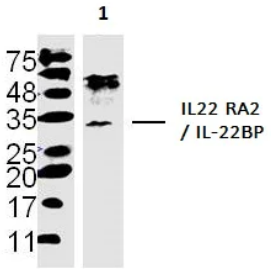
Western blot - Anti-IL22 RA2/IL-22BP antibody (ab203211)

IL22 RA2/IL-22BP Western blot staining of Rat testis tissue lysates using rabbit Anti-IL22 RA2/IL-22BP antibody

Primary incubation: overnight at 4°C followed by a conjugated secondary antibody for 60 minutes at 37°C.
All lanes:
Western blot - Anti-IL22 RA2/IL-22BP antibody (ab203211) at 1/300 dilution

All lanes:
Rat testis tissue lysates

Predicted band size: 31 kDa



Western blot - Anti-IL22 RA2/IL-22BP antibody (ab203211)

All lanes:
Western blot - Anti-IL22 RA2/IL-22BP antibody (ab203211) at 1/300 dilution

All lanes:
Mouse spleen tissue lysates

Secondary

All lanes:
Conjugated secondary antibody at 1/10000 dilution

Predicted band size: 31 kDa

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