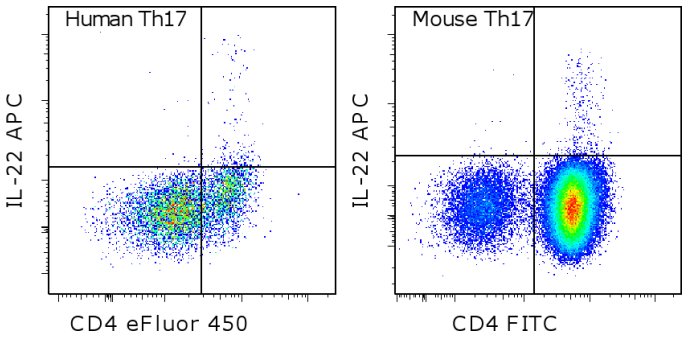
Anti-Human/Mouse IL-22 APC

Catalog Number: 17-7222
Also known as: Interleukin-22, IL22
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of 7-day Th17-polarized CD4+ normal human peripheral blood cells (left) and 12-day Th17-polarized mouse splenocytes (right) with 0.125 ug of Anti-Human/Mouse IL-22 APC. Both sets of polarized cells were incubated with PMA, Ionomycin, and Brefeldin A for 5 hours prior to treatment with the Fixation and Permeabilization Kit (cat. 88-8823). Human cells were then costained with Anti-Human CD4 eFluor 450 (cat. 48-0049) and mouse cells were costained with Anti-Mouse CD4 FITC (cat. 11-0042). Quadrants were set based on Th17 cells treated with Brefeldin A alone and cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human/Mouse IL-22 APC
REF **Catalog Number:** 17-7222
Clone: IL22JOP
Concentration: 0.2 mg/mL
Host/Isotype: Rat IgG2a, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial
Contains sodium azide

Description

The monoclonal antibody IL22JOP reacts with and inhibits the bioactivity of human and mouse IL-22. IL-22 is a 20 kDa member of the IL-10 cytokine family that is secreted primarily by Th17 cells, NK cells, and other T cells. Compared to IL-6 or TGF-β, IL-23 can induce greater levels of IL-22 in *in vitro*-differentiated Th17 cells. This observation suggests that IL-22 may be secreted by more fully differentiated Th17 cells *in vivo*. Recently, it was demonstrated that IL-22 could protect hosts from bacterial infection of the lungs and gut. Moreover, it has been reported that anti-CD3/CD28-induced production of IL-22 by PBMCs was elevated significantly in asthma patients compared to control patients. Flow cytometric analysis also showed that the frequencies of IL-17$^+$IL-22$^+$ CD4 T cells were increased in PBMCs from patients with ankylosing spondylitis and rheumatoid arthritis.

Applications Reported

This IL22JOP antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested

This IL22JOP antibody has been tested on Th17-polarized CD4+ normal human peripheral blood cells. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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Hughes T, Becknell B, McClory S, Briercheck E, Freud AG, Zhang X, Mao H, Nuovo G, Yu J, Caligiuri MA. Stage

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three immature human natural killer cells found in secondary lymphoid tissue constitutively and selectively express the TH17 cytokine interleukin-22. Blood. 2009 May;87(5):451-4.

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Bettelli E, Korn T, Oukka M, Kuchroo VK. Induction and effector functions of T(H)17 cells. Nature. 2008 Jun 19;453(7198):1051-7.

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Related Products
11-0042 Anti-Mouse CD4 FITC (RM4-5)
12-6988 Anti-Human/Mouse ROR gamma (t) PE (AFKJS-9)
12-7177 Anti-Mouse/Rat IL-17A PE (eBio17B7)
12-7179 Anti-Human IL-17A PE (eBio64DEC17)
46-7169 Anti-Human IL-17F PerCP-eFluor® 710 (SHLR17)
48-0049 Anti-Human CD4 eFluor® 450 (RPA-T4)
50-7471 Anti-Mouse IL-17F eFluor® 660 (Alexa Fluor® 647 Replacement) (eBio18F10)
88-8823 Fixation & Permeabilization Buffers

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