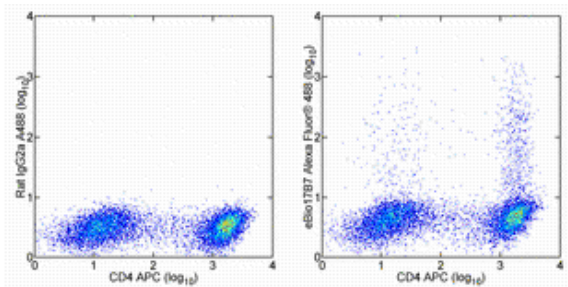


Anti-Mouse/Rat IL-17A Alexa Fluor® 488

Catalog Number: 53-7177

Also Known As: Interleukin-17A, Cytotoxic T-lymphocyte-associated antigen 8, CTLA-8

RUO: For Research Use Only. Not for use in diagnostic procedures.



Intracellular staining of splenocytes cultured under Th17-polarizing conditions followed by reactivation with PMA and Ionomycin in the presence of brefeldin A for 5 hours with 0.25 µg of Rat IgG2a K Isotype Control APC (cat. 17-4321) (left) or 0.25 µg of Anti-Mouse/Rat IL-17A Alexa Fluor® 488 (right). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Mouse/Rat IL-17A Alexa Fluor® 488


REF **Catalog Number:** 53-7177

Clone: eBio17B7

Concentration: 0.5 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.

 **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

 **Contains sodium azide**

Description

The eBio17B7 antibody reacts with mouse and rat IL-17A with no recognition of IL-17F. Interleukin-17A (IL-17A) is a CD4+ T cell-derived cytokine that promotes inflammatory responses in cell lines and is elevated in rheumatoid arthritis, asthma, multiple sclerosis, psoriasis, and transplant rejection. The cDNA encoding human IL-17A was isolated from a library of CD4+ T cells; the encoded protein exhibits 72 percent amino acid identity with HVS13, an open reading frame from a T lymphotropic Herpesvirus saimiri, and 63 percent with mouse CTLA-8 (cytotoxic T-lymphocyte associated antigen-8). Human IL-17A exists as glycosylated 20-30 kD homodimers. High levels of IL-17A homodimer are produced by activated peripheral blood CD4+ T-cells. IL-17A enhances expression of the intracellular adhesion molecule-1 (ICAM-1) in human fibroblasts. Human IL-17A also stimulates epithelial, endothelial, or fibroblastic cells to secrete IL-6, IL-8, G-CSF, and PGE2. In the presence of human IL-17A, fibroblasts can sustain the proliferation of CD34+ hematopoietic progenitors and induce maturation into neutrophils. Mouse, rat, and human IL-17A can induce IL-6 secretion in mouse stromal cells, indicating that all homologs can recognize the mouse IL-17A receptor.

IL-23-dependent, IL-17A-producing CD4+ T cells (Th-17 cells) have been identified as a unique subset of Th cells that develops along a pathway that is distinct from the Th1- and Th2- cell differentiation pathways. The hallmark effector molecules of Th1 and Th2 cells, e.g., IFN gamma and IL-4, have each been found to negatively regulate the generation of these Th-17 cells.

Applications Reported

The eBio17B7 antibody has been reported useful for ELISA/ELISPOT detection and intracellular staining for flow cytometric analysis.

Applications Tested

The fluorochrome-conjugated eBio17B7 antibody has been tested by intracellular staining for flow cytometric analysis of PMA and Ionomycin-restimulated splenocytes cultured under Th17-polarizing conditions for 3 days. It can be used at less than or equal to 0.50 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Staining has been successfully done using the Foxp3 buffer system (cat 00-5523).

Staining has been successfully done using the Foxp3 buffer system (cat 00-5523). Please contact Technical Support Department at tech@ebioscience.com. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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Related Products

00-4975 Cell Stimulation Cocktail (plus protein transport inhibitors) (500X)

00-5523 Foxp3 / Transcription Factor Staining Buffer Set

12-7221 Anti-Mouse IL-22 PE (1H8PWSR)

14-8231 Mouse IL-23 Recombinant Protein

17-7211 Anti-Mouse IL-21 APC (FFA21)

53-4321 Rat IgG2a K Isotype Control Alexa Fluor® 488 (eBR2a)

88-7272 Mouse IL-17AF (heterodimer) ELISA Ready-SET-Go!®

88-7371 Mouse IL-17A (homodimer) ELISA Ready-SET-Go!®

88-8411 Mouse Th17 Cytokine Staining Panel

88-8823 Fixation & Permeabilization Buffers

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