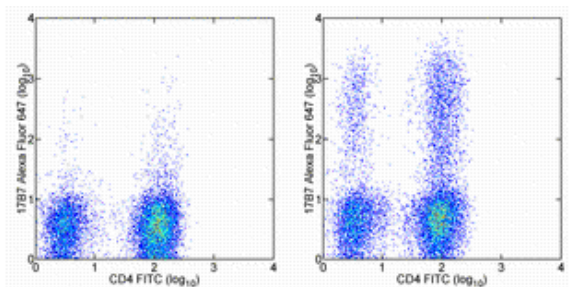


## Anti-Mouse/Rat IL-17A Alexa Fluor® 647 (To Be Discontinued. Refer to Cat. No. 50-7177)

**Catalog Number:** 51-7177

**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 Th17-polarized splenocytes restimulated with Brefeldin A alone (left) or 6-hour PMA/Ionomycin and Brefeldin A (right) with Anti-Mouse CD4 FITC (cat. 11-0041) and 0.125 ug of Anti-Mouse/Rat IL-17A Alexa Fluor® 647. Cells in the lymphocyte gate were used for analysis.

### Product Information

**Contents:** Anti-Mouse/Rat IL-17A Alexa Fluor® 647 (To Be Discontinued. Refer to Cat. No. 50-7177)

 **Catalog Number:** 51-7177

**Clone:** eBio17B7

**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.

 **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

 **Caution, contains 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

This eBio17B7 antibody has been tested by intracellular staining and flow cytometric analysis of PMA and Ionomycin-restimulated splenocytes cultured under Th17-polarizing conditions for 3 days. 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<sup>5</sup> to 10<sup>8</sup> 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). Please contact Technical Support Department at tech@ebioscience.com.

### References

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#### **Related Products**

11-0041 Anti-Mouse CD4 FITC (GK1.5)

12-7213 Anti-Mouse IL-21 PE (mhalx21)

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

51-4321 Rat IgG2a K Isotype Control Alexa Fluor® 647 (To Be Discontinued. Refer to Cat. No. 50-4321) (eBR2a)

51-7178 Anti-Human IL-17A Alexa Fluor® 647 (To Be Discontinued. Refer to Cat. No. 50-7178) (eBio64CAP17)

51-7179 Anti-Human IL-17A Alexa Fluor® 647 (To Be Discontinued. Refer to Replacement Format eFluor® 660, cat. 50-7179) (eBio64DEC17)

88-8411 Mouse Th17 Cytokine Staining Panel

88-8823 Fixation & Permeabilization Buffers

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