

# **Anti-Human IL-17A Purified**

Catalog Number: 14-7179 Also Known As:Interleukin-17A, CTLA8 RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information	
Contents: Anti-Human IL-17A Purified REF Catalog Number: 14-7179	<b>Formulation:</b> aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Clone: eBio64DEC17 Concentration: 0.5 mg/mL Host/Isotype: Mouse IgG1, kappa	<b>Temperature Limitation:</b> Store at 2-8°C. <b>LOT Batch Code:</b> Refer to Vial <b>Use By:</b> Refer to Vial

## Description

The eBio64DEC17 antibody reacts with human IL-17A. The eBio64DEC17 antibody is a neutralizing antibody. 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.

Intracellular staining by eBio64DEC17 antibody identifies the same cell population as the eBio64CAP17 antibody, as can be seen in costaining experiments using both antibodies.

## **Applications Reported**

This eBio64DEC17 antibody has been reported for use in immunohistology staining and ELISA.

## **Applications Tested**

This eBio64DEC17 antibody has been tested by ELISA.

## References

Lee JJ, Chang YL, Lai WL, Ko JY, Kuo MY, Chiang CP, Azuma M, Chen CW, Chia JS. Increased prevalence of interleukin-17-producing CD4(+) tumor infiltrating lymphocytes in human oral squamous cell carcinoma. Head Neck. 2011 Sep;33(9):1301-8 (ebio64DEC17m IHC frozen)

Acosta-Rodriguez EV, Napolitani G, et al. 2007. Interleukins 1beta and 6 but not transforming growth factor-beta are essential for the differentiation of interleukin 17-producing human T helper cells. Nat Immunol. 8(9):942-9. (FC, PubMed)

Chen Z, Tato CM, Muul L, Laurence A, O'Shea JJ. Distinct regulation of interleukin-17 in human T helper lymphocytes. Arthritis Rheum. 2007 Sep;56(9):2936-46. (ebio64Dec17, FC PubMed)

## **Related Products**

14-4714 Mouse IgG1 K Isotype Control Purified (P3.6.2.1) 14-7178 Anti-Human IL-17A Purified (eBio64CAP17) 18-4100 Avidin HRP 39-8179 Human IL-17A Single-Use ELISA RSG Standard 88-7117 Human IL-17AF (heterodimer) ELISA Ready-SET-Gol® 88-7176 Human IL-17A (homodimer) ELISA Ready-SET-Gol®