

TECHNICAL DATA SHEET

# Alexa Fluor® 647 Anti-Human IL-17A (4H1524)

Catalog Number: 10-7179

## PRODUCT INFORMATION

**Contents:** Alexa Fluor® 647 Anti-Human IL-17A (4H1524)

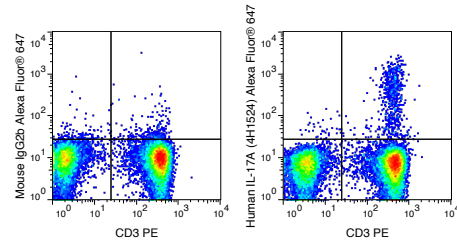
**Isotype:** Mouse IgG2b, kappa

**Concentration:** 5 uL (0.5 ug)/test

**Clone:** 4H1524

**Reactivity:** Human

**Formulation:** 10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, 0.05% BSA, 0.05% NaN<sub>3</sub>, pH7.2



Human PBMC were stimulated with PMA and Ionomycin and stained with PE Anti-Human CD3 (50-0038), followed by intracellular staining with 0.5 ug Alexa Fluor® 647 Anti-Human IL-17A (10-7179) (right panel) or 0.5 ug Alexa Fluor® 647 Mouse IgG2b (left panel).

## DESCRIPTION

The 4H1524 antibody reacts with human Interleukin-17A (IL-17A), a member of the IL-17 cytokine family which includes IL-17A, IL-17B, IL-17C, IL-17E and IL-17F. These proteins share varying degrees of sequence homology and patterns of expression, and their unique functional roles are still being elucidated. IL-17A, originally known as CTLA-8 in mouse, can exist as homodimers and has also been shown to combine with IL-17F into an IL-17AF heterodimer, although the function of this form is not yet established. IL-17 expression originally led to recognition of the Th17 subset of CD4<sup>+</sup> T cells, which is distinct from the Th1 / Th2 subsets previously described. The Th17 cell secretes a signature group of cytokines, including IL-17, IL-21 and IL-22, which support innate immune function within tissues at external barrier sites and are protective against external pathogens. IL-17A is an important mediator of inflammation and has been implicated in a variety of autoimmune processes. Among its many effector functions, IL-17A enhances expression of the intracellular adhesion molecule-1 (ICAM-1) in fibroblasts and promotes expression of numerous cytokines by non-immune cells such as epithelial, endothelial, fibroblast and stromal cells. The 4H1524 antibody may be used for analysis of human IL-17A by intracellular staining in flow cytometry.

## PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

## APPLICATION NOTES

This antibody preparation has been pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10<sup>5</sup> to 1x10<sup>8</sup> cells.

## REFERENCES

Chen Z and O'Shea JJ. 2008. Immunol. Res. 41(2):87-102. Mangan PR, et al. 2006. Nature. 441:231-234. Veldhoen M, et al. 2006. Immunity. 24:179-189.

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.

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