

### Human Th17 Flow™ Kit (CD3 FITC/CD4 PE/IL-17 Alexa Fluor® 647)

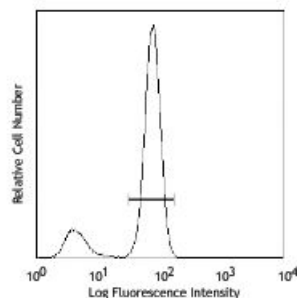
**Catalog # / Size:** 2297005 / 25 tests

**Clone:** UCHT1/RPA-T4/BL168

**Isotype:** Mouse IgG1, κ / IgG1, κ / IgG1, κ

**Reactivity:** Human

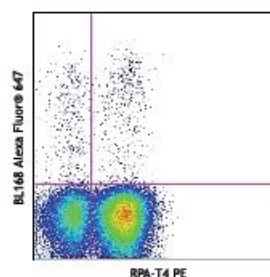
**Concentration:** Lot-specific



CD3 FITC

### Applications:

**Applications:** Intracellular Staining for Flow Cytometry



**Application Staining Procedure:****Notes:**

1. Distribute 0.5-1 X 10<sup>6</sup> cells/100 microL/tube into 12 X 75 mm plastic testing tubes.
2. Add 0.5 ml/tube Fixation Buffer (Cat. No. 420801) to each tube, vortex and incubate at room temperature for 20 minutes.
3. Centrifuge at 350 x g for 5 minutes, discard supernatant.
4. Prepare 1X Intracellular Staining Perm Wash Buffer (Cat. No. 421002) by diluting 1 part of 10X Intracellular Staining Perm Wash Buffer (Cat. No. 421002) with 9 part of DI water.
5. Add 2ml 1X Intracellular Staining Perm Wash Buffer to each tube, vortex and incubate at room temperature for 20 minutes, then spin at 350 x g for 5 minutes and remove the supernatant.
6. Wash once by adding 2ml 1X Intracellular Staining Perm Wash Buffer to each tube, spin and remove the supernatant.
7. Resuspend the pellet in 100 microL of 1X Intracellular Staining Perm Wash Buffer.
8. Add 20 microL Alexa Fluor® 647 mouse IgG1, k isotype control/CD3 FITC/CD4 PE or IL-17 Alexa Fluor® 647/CD3 FITC/CD4 PE into appropriate tube and incubate at room temperature in the dark for 30 minutes.
10. Wash twice with 2ml 1X Intracellular Staining Perm Wash Buffer, and resuspend in 0.5ml cell staining buffer then analyze under flow cytometer with appropriate instrument setting.

**Note:**

1. The Fixation buffer contains 4% paraformaldehyde, which is toxic and is a suspected carcinogen. Contact with eyes, skin and mucous membranes should be avoided.
2. Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.
3. Please note that single color controls are required to perform instrument compensation and are not included in the kit.

**Application  
References:**

1. Ji L, *et al.* 2012. *PLoS One*. 7:e50909. [PubMed](#).
2. Wang JC, *et al.* 2015. *PLoS One*.10:116723. [PubMed](#)

**Description:** Th17 cells are a subset of CD4<sup>+</sup> T cells defined by their ability to produce the cytokines IL-17, IL-17F and IL-22. Th17 cells participate in normal epithelial immunity, their dysregulation is implicated in psoriasis, multiple sclerosis, systemic lupus erythematosus, rheumatoid arthritis, and inflammatory bowel disease. 's human Th17 flow kit is designed and formulated specifically for one-step intracellular immunofluorescence staining and flow cytometric analysis of Th17 cells in a mixed cell population. This kit is composed of fluorochrome conjugated anti-human CD3, CD4 and IL-17 antibodies, isotype control and the critical buffers. It is easy to use for identification of Th17 cells.

**Materials provided:**

1. Mouse IgG1,k isotype control Alexa Fluor® 647/CD3 FITC/CD4 PE,25 tests
2. Anti-human IL-17 Alexa Fuor® 647/CD3 FITC/CD4 PE, 25 tests
3. Fixation Buffer, 100ml, Cat. No. 420801
4. Intracellular Staining Perm Wash Buffer (10X), 100 ml, Cat. No. 421002

**Materials not included:**

Cell Staining Buffer (Cat. No. 420201)

**Antigen  
References:**

1. King C, *et al.* 2004 *Cell* 117:265.
2. Betelli E, *et al.* 2006 *Nature* 441:235.
3. Betelli E, *et al.* 2007 *Nat. Imm.* 8:345.
4. Wilson NJ, *et al.* 2007 *Nat. Imm.* 8:950