

**APC anti-human CD3**

**Catalog # / Size:** 2102055 / 25 tests  
 2102060 / 100 tests  
 2102195 / 500 tests  
 2102290 / 100 µg

**Clone:** UCHT1

**Isotype:** Mouse IgG1, κ

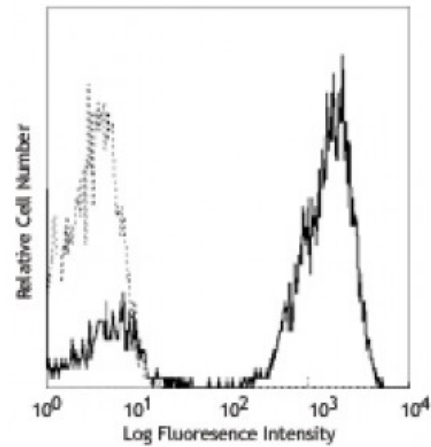
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.

**Formulation:** microg size: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.  
 test sizes: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Workshop Number:** III 471

**Concentration:** microg sizes: 0.2 mg/ml  
 test sizes: lot-specific



Human peripheral blood lymphocytes stained with UCHT1 APC

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining using the microg size, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections<sup>4,6,7</sup> and formalin-fixed paraffin-embedded sections<sup>11</sup>, immunoprecipitation<sup>1</sup>, activation of T cells<sup>2,3,5</sup>, and Western blotting<sup>9</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 300414). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 300438) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

- Application References:**
1. Salmeron A, *et al.* 1991. *J. Immunol.* 147:3047. (IP)
  2. Graves J, *et al.* 1991. *J. Immunol.* 146:2102. (Activ)
  3. Lafont V, *et al.* 2000. *J. Biol. Chem.* 275:19282. (Activ)
  4. Ryschich E, *et al.* 2003. *Tissue Antigens* 62:48. (IHC)
  5. Thompson AG, *et al.* 2004. *J. Immunol.* 173:1671. (Activ)
  6. Sakkas LI, *et al.* 1998. *Clin. Diagn. Lab. Immun.* 5:430. (IHC)

7. Mack CL, *et al.* 2004. *Pediatr. Res.* 56:79. (IHC)
  8. Thakral D, *et al.* 2008. *J. Immunol.* 180:7431. (FC) [PubMed](#)
  9. Van Dongen JJM, *et al.* 1988. *Blood* 71:603. (WB)
  10. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
  11. Pollard, K. *et al.* 1987. *J. Histochem. Cytochem.* 35:1329. (IHC)
  12. Luckashenak N, *et al.* 2013. *J. Immunol.* 190:27. [PubMed](#)
  13. Headland SE, *et al.* 2014. *Sci Rep.* 4:5237. [PubMed](#)
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**Description:** CD3 $\epsilon$  is a 20 kD chain of the CD3/T-cell receptor (TCR) complex which is composed of two CD3 $\epsilon$ , one CD3 $\gamma$ , one CD3 $\delta$ , one CD3 $\zeta$  (CD247), and a T-cell receptor ( $\alpha/\beta$  or  $\gamma/\delta$ ) heterodimer. It is found on all mature T cells, NKT cells, and some thymocytes. CD3, also known as T3, is a member of the immunoglobulin superfamily that plays a role in antigen recognition, signal transduction, and T cell activation.

- Antigen**
- References:**
1. Barclay N, *et al.* 1993. *The Leucocyte FactsBook*. Academic Press. San Diego.
  2. Beverly P, *et al.* 1981. *Eur. J. Immunol.* 11:329.
  3. Lanier L, *et al.* 1986. *J. Immunol.* 137:2501-2507.