

**Purified anti-human CD3**

**Catalog # / Size:** 2102005 / 25 µg  
2102010 / 100 µg

**Clone:** UCHT1

**Isotype:** Mouse IgG1, κ

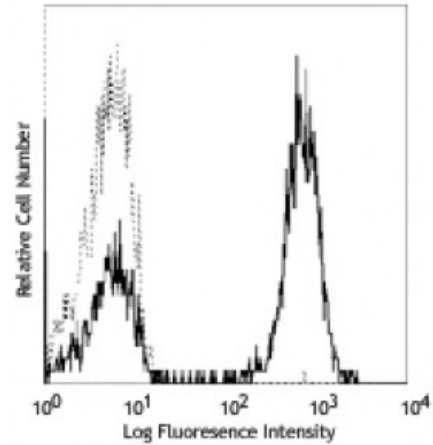
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Workshop Number:** III 471

**Concentration:** 0.5



Human peripheral blood lymphocytes stained with purified UCHT1 and then detected with anti-mouse IgGs FITC

**Applications:**

**Applications:** Other

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. 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. Laurent AJ, *et al.* 2014. *PLoS One.* 9:103683. [PubMed](#)
  14. Li J, *et al.* 2015. *Cancer Res.* 75:508. [PubMed](#)

**Description:** CD3ε 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.