

## Purified anti-human CD3

**Catalog # / Size:** 300401 / 25 µg  
300402 / 100 µg

**Clone:** UCHT1

**Isotype:** Mouse IgG1, κ

**Workshop Number:** III 471

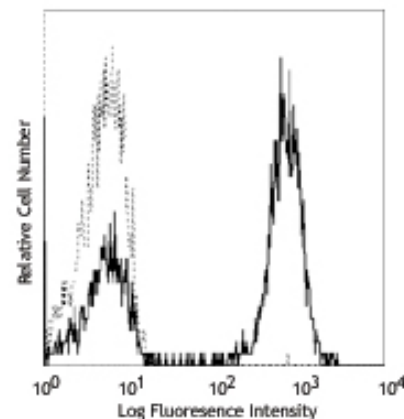
**Reactivity:** Human, **Cross-Reactivity:** Chimpanzee

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

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

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C.



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

## Applications:

**Applications:** FC - *Quality tested*  
IP, IHC, WB - *Reported in the literature*  
CyTOF® - *Validated*

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.25 µg per million cells in 100 µl 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/µg).

**Application References:**

- Salmeron A, *et al.* 1991. *J. Immunol.* 147:3047. (IP)
- Graves J, *et al.* 1991. *J. Immunol.* 146:2102. (Activ)
- Lafont V, *et al.* 2000. *J. Biol. Chem.* 275:19282. (Activ)
- Ryschich E, *et al.* 2003. *Tissue Antigens* 62:48. (IHC)
- Thompson AG, *et al.* 2004. *J. Immunol.* 173:1671. (Activ)
- Sakkas LI, *et al.* 1998. *Clin. Diagn. Lab. Immun.* 5:430. (IHC)
- Mack CL, *et al.* 2004. *Pediatr. Res.* 56:79. (IHC)
- Thakral D, *et al.* 2008. *J. Immunol.* 180:7431. (FC) PubMed
- Van Dongen JJM, *et al.* 1988. *Blood* 71:603. (WB)
- Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
- Pollard, K. *et al.* 1987. *J. Histochem. Cytochem.* 35:1329. (IHC)
- Luckashenak N, *et al.* 2013. *J. Immunol.* 190:27. PubMed.

**Description:** CD3ε is a 20 kD chain of the CD3/T-cell receptor (TCR) complex which is composed of two CD3ε, one CD3γ, one CD3δ, one CD3ζ (CD247), and a T-cell receptor (α/β or γ/δ) heterodimer. It is found on all mature T lymphocytes, NK-T 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:**

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

### Related Products:

Product	Clone	Application
Purified anti-human CD19	HIB19	FC, IHC, CyTOF®
Purified anti-human CD3	HIT3a	FC, IHC, IP
Purified anti-human CD8a	HIT8a	FC, IHC
Purified anti-human CD4	RPA-T4	FC, IHC, CyTOF®
Purified anti-human CD8a	RPA-T8	FC, IHC, CyTOF®
Purified Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC, ICC, IF, IHC, IP, WB
APC Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	FC
Biotin Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	FC, ELISA, IHC, IF, WB
HRP Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	ELISA, IHC, WB
PE Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	FC
Cell Staining Buffer		FC, ICC, ICFC

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RBC Lysis Buffer (10X)

FC, ICFC



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BioLegend Inc., 9727 Pacific Heights Blvd, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587