

## Purified anti-human CD3

**Catalog # / Size:** 300301 / 25 µg  
300302 / 100 µg

**Clone:** HIT3a

**Isotype:** Mouse IgG2a, κ

**Workshop Number:** V CD03.05

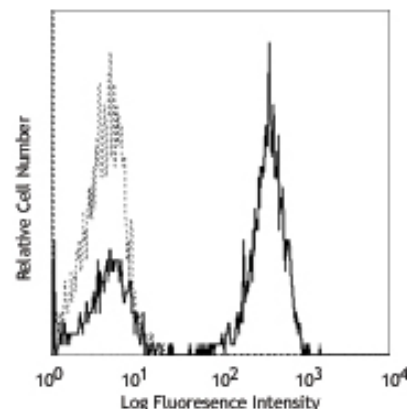
**Reactivity:** Human

**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 HIT3a and detected with anti-mouse IgGs FITC

## Applications:

**Applications:** FC - *Quality tested*  
IP, IHC - *Reported in the literature*

**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 (for the relevant formats) applications include: immunohistochemical staining of acetone-fixed frozen sections, immunoprecipitation, and activation of T lymphocytes<sup>4-7</sup>. The HIT3a antibody is able to stimulate T cell activation. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 300314). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 300332) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/µg).

**Application References:**

- Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
- Knapp W. 1989. Leucocyte Typing IV. Oxford University Press New York.
- Barclay N, *et al.* 1997. The Leucocyte Antigen Facts Book. Academic Press Inc. San Diego.
- Sedelies KA, *et al.* 2004. *J. Biol. Chem.* 279:26581. (Activ)
- Rivollier A, *et al.* 2004. *Blood* 104:4029. (Activ)
- Scharschmidt E, *et al.* 2004. *Mol. Cell Biol.* 24:3860. (Activ)
- Smeltz RB. 2007. *J. Immunol.* 178:4786. (Activ)
- Kilpinen L, *et al.* 2013. *J Lipid Res.* 54:622. 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 CD8a                          | HIT8a    | FC, IHC                  |
| Purified anti-human CD4                           | RPA-T4   | FC, IHC, CyTOF®          |
| Purified anti-human CD8a                          | RPA-T8   | FC, IHC, CyTOF®          |
| Purified anti-human CD3                           | UCHT1    | FC, IHC, IP, WB, CyTOF®  |
| 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           |
| Purified Mouse IgG2a, κ Isotype Ctrl              | MOPC-173 | FC, ICC, IF, IHC, IP, WB |
| PE Goat anti-mouse IgG (minimal x-reactivity)     | Poly4053 | FC                       |
| Cell Staining Buffer                              |          | FC, ICC, ICFC            |
| RBC Lysis Buffer (10X)                            |          | FC, ICFC                 |



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