

## PE/Cy5 anti-human CD3

**Catalog # / Size:** 300309 / 25 tests  
300310 / 100 tests

**Clone:** HIT3a

**Isotype:** Mouse IgG2a,  $\kappa$

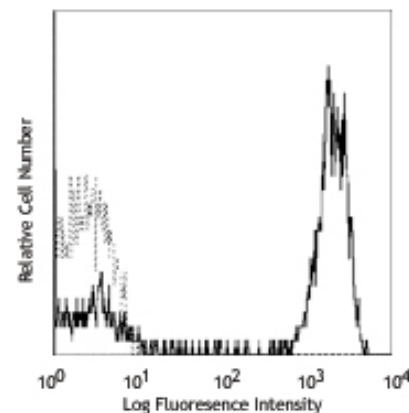
**Workshop Number:** V CD03.05

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE/Cy5 under optimal conditions. The solution is free of unconjugated PE/Cy5 and unconjugated antibody.

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

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes stained with HIT3a PE/Cy5

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20  $\mu$ l to 5  $\mu$ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**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/ $\mu$ g, Azide-Free, 0.2  $\mu$ m 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/ $\mu$ g).

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**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)

**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 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
PE/Cy5 anti-human CD19	HIB19	FC
PE/Cy5 anti-human CD8a	HIT8a	FC
PE/Cy5 anti-human CD4	RPA-T4	FC
PE/Cy5 anti-human CD8a	RPA-T8	FC
PE/Cy5 anti-human CD3	UCHT1	FC
PE/Cy5 anti-human CD5	UCHT2	FC
PE/Cy5 Mouse IgG2a, $\kappa$ Isotype Ctrl	MOPC-173	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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