Product Data Sheet

PerCP/Cy5.5 anti-human CD3

Catalog # / Size: 2101640 / 100 tests

2101635 / 25 tests

Clone:

Isotype: Mouse IgG2a, κ

Reactivity: Human

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

> chromatography, and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated

antibody.

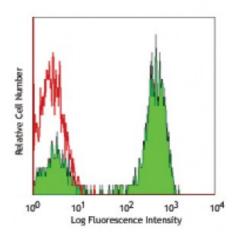
Phosphate-buffered solution, pH 7.2, Formulation:

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Workshop **Number:** V CD03.05

Concentration: Lot-specific



Human peripheral blood lymphocytes stained with HIT3a PerCP/Cy5.5

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, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and 564 nm and a maximum emission of 690 nm.

Application Notes: Additional reported (for the relevant formats) applications include: immunohistochemical staining of acetone-fixed frozen sections,

immunoprecipitation, and activation of T lymphocytes⁴⁻⁷. 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/microg).

Application References: 1. Schlossman S, et al. Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.

2. Knapp W. 1989. Leucocyte Typing IV. Oxford University Press New York.

3. Barclay N, et al. 1997. The Leucocyte Antigen Facts Book. Academic Press Inc.

4. Sedelies KA, et al. 2004. J. Biol. Chem. 279:26581. (Activ)

5. Rivollier A, et al. 2004. Blood 104:4029. (Activ)

6. Scharschmidt E, et al. 2004. Mol. Cell Biol. 24:3860. (Activ)

7. Smeltz RB. 2007. *J. Immunol.* 178:4786. (Activ)

8. Edgar CE, et al. 2015. PLoS One. 10:117614. PubMed

CD3ɛ is a 20 kD chain of the CD3/T-cell receptor (TCR) complex which is **Description:**

composed of two CD3 ϵ , one CD3 γ , one CD3 δ , one CD3 ζ (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:

- 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.