

Pacific Blue™ anti-human CD3

Catalog # / 2101650 / 100 tests
Size: 2101645 / 25 tests

Clone: HIT3a

Isotype: Mouse IgG2a, κ

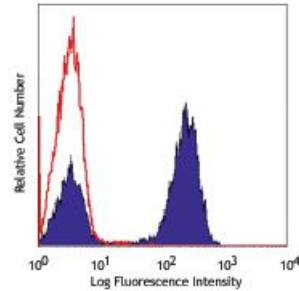
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

Formulation: Phosphate-buffered solution, pH 7.2, 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 Pacific Blue™

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 ≤ 2.0 microg per 10^6 cells in 100 microL volume or 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

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/ μ g, Azide-Free, 0.2 μ 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/microg).

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 ϵ is a 20 kD chain of the CD3/T-cell receptor (TCR) complex which is 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.