

Biotin anti-human CD3

Catalog # / Size: 2101515 / 25 µg
2101520 / 100 µg

Clone: HIT3a

Isotype: Mouse IgG2a, κ

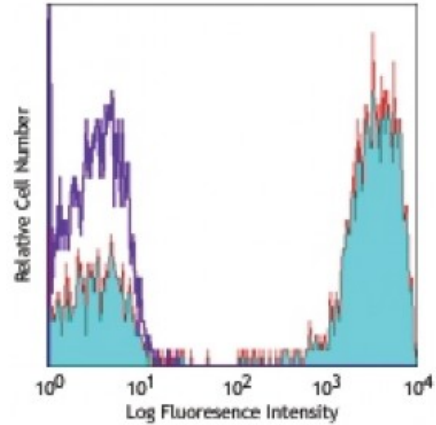
Reactivity: Human

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

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

Workshop Number: V CD03.05

Concentration: 0.5



Human peripheral blood lymphocytes stained with biotinylated HIT3a, followed by Sav-PE

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 ≤0.5 microg per million cells in 100 microL 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 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:**
- 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: 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:**
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.