

Product Data Sheet

102

Log Fluoresence Intensity

Human peripheral blood lymphocytes stained with biotinylated HIT3a,

followed by Sav-PE

103

104

Relative Cell Number

100

Biotin anti-human CD3

Catalog # / Size: 300303 / 25 µg

300304 / 100 µg

Clone: HIT3a

Isotype: Mouse IgG2a, κ

Workshop Number: V CD03.05

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.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. Do not freeze.

Applications:

Applications: FC - Quality tested

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 ≤0.5 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 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/μg).

- **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. San Diego. 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)

Description: CD3ε is a 20 kD chain of the CD3/T-cell receptor (TCR) complex which is composed of two CD3ε, one CD3γ, 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.

Application **Related Products: Product** Clone FC FC FC FC, ICFC FC, ICFC Biotin anti-human CD19 HIB19

HIT8a Biotin anti-human CD8a Biotin anti-human CD4 RPA-T4 RPA-T8 Biotin anti-human CD8a Biotin anti-human CD3 UCHT1 Biotin Mouse IgG2a, κ Isotype Ctrl **MOPC-173**

APC Streptavidin APC/Cy7 Streptavidin HRP Streptavidin PE Streptavidin PE/Cy5 Streptavidin PE/Cy7 Streptavidin Cell Staining Buffer RBC Lysis Buffer (10X)

Human TruStain FcX™ (Fc Receptor Blocking Solution)

FC, ICFC ELÍSA, ELISPOT, IHC, WB

FC, ICFC FC, ICFC FC, ICFC FC, ICC, ICFC FC, ICFC

FC, ICC, ICFC



