

# Product Data Sheet

## Alexa Fluor® 700 anti-human CD3

**Catalog # / Size:** 300323 / 25 µg  
300324 / 100 µg

**Clone:** HIT3a

**Isotype:** Mouse IgG2a, κ

**Workshop Number:** V CD03.05

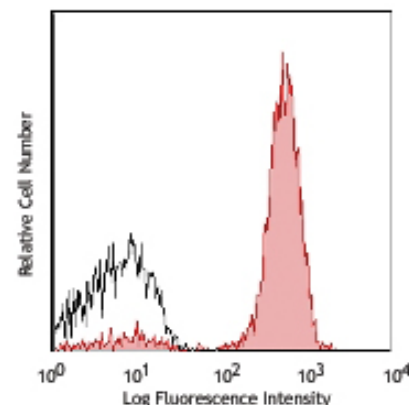
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 700 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 700.

**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 and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes stained with HIT3a Alexa Fluor® 700

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** This reagent is developed for immunofluorescent staining for flow cytometric analysis; the suggested use of this reagent is ≤1.0 µg per million cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

\*\* Alexa Fluor® 700 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 700 dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**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/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:**

- 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:**

- 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  
Cell Staining Buffer  
RBC Lysis Buffer (10X)  
Alexa Fluor® 700 Mouse IgG2a, κ Isotype Ctrl  
Human TruStain FcX™ (Fc Receptor Blocking Solution)

### Clone

MOPC-173

### Application

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



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