

Alexa Fluor® 700 anti-human CD8a

Catalog # / Size: 300919 / 25 µg
300920 / 100 µg

Clone: HIT8a

Isotype: Mouse IgG1, κ

Workshop Number: V CD08.10

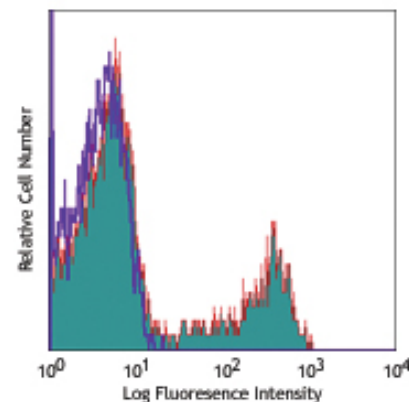
Reactivity: Human, **Cross-Reactivity:** Chimpanzee

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 HIT8a 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: Clone HIT8a recognizes the alpha chain of CD8⁵. It does not block the binding of RPA-T8 antibody to CD8a.

Additional reported applications of this antibody (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections^{5,6}.

- 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.
 - Awasthi, S., *et al.* 2011. *J. Virol* 85:10472. PubMed
 - Coppieters KT, *et al.* 2012. *J. Exp. Med.* 209:51. (IHC, epitope)
 - Suzuki F, *et al.* 2012. *Arthritis Res. Ther.* 14:R48. (IHC)

Description: CD8a is a 32-34 kD type I glycoprotein. It forms a homodimer (CD8a/a) or heterodimer (CD8a/b) with CD8b. CD8, also known as T8 and Leu2, is a member of the immunoglobulin superfamily found on the majority of thymocytes, a subset of peripheral blood T cells, and NK cells (which express almost exclusively CD8a homodimers). CD8 acts as a co-receptor with MHC class I-restricted T cell receptors in antigen recognition and T cell activation and has been shown to play a role in thymic differentiation. Two domains in CD8a are important for function: the extracellular IgSF domain binds the α₃ domain of MHC class I and the cytoplasmic CXCP motif binds the tyrosine kinase p56 Lck.

Antigen References: 1. Barclay N, *et al.* 1993. The Leucocyte Antigen FactsBook. Academic Press Inc. San Diego.

Related Products:Product	Clone	Application
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
Alexa Fluor® 700 Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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