

**Alexa Fluor® 700 anti-human CD8a**

**Catalog # / Size:** 2104595 / 25 µg  
2104600 / 100 µg

**Clone:** HIT8a

**Isotype:** Mouse IgG1, κ

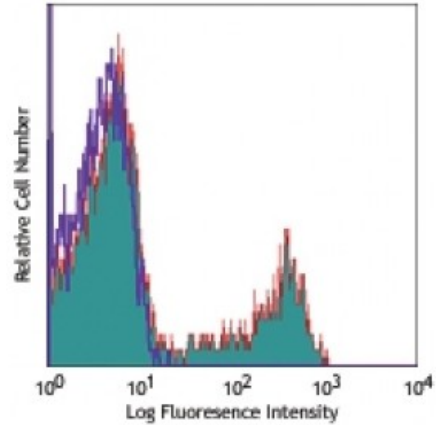
**Reactivity:** Human

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

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

**Workshop Number:** V CD08.10

**Concentration:** 0.5



Human peripheral blood lymphocytes stained with HIT8a Alexa Fluor® 700

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. The suggested use of this reagent is ≤1.0 microg per million cells in 100 microL 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.

**Application Notes:** Clone HIT8a recognizes the α 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<sup>5,6</sup>. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue.

**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  $\alpha_3$  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.