

Biotin anti-human CD8a

Catalog # / Size: 300903 / 25 µg
300904 / 100 µg

Clone: HIT8a

Isotype: Mouse IgG1, κ

Workshop Number: V CD08.10

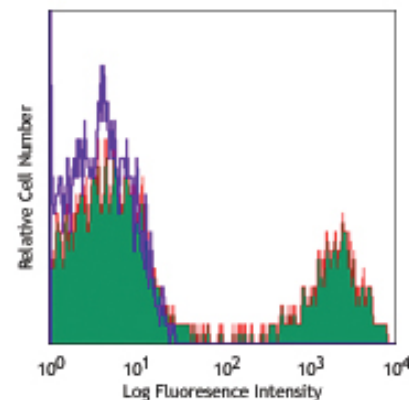
Reactivity: Human, **Cross-Reactivity:** Chimpanzee

Preparation: The antibody was purified by affinity chromatography, and conjugated with 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.**



Human peripheral blood lymphocytes stained with biotinylated HIT8a, followed by Sav-PE

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 ≤0.125 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

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 |
|-------------------|---|---------|---------------|
| | PE Streptavidin | | FC, ICFC |
| | Cell Staining Buffer | | FC, ICC, ICFC |
| | RBC Lysis Buffer (10X) | | FC, ICFC |
| | Human TruStain FcX™ (Fc Receptor Blocking Solution) | | FC, ICC, ICFC |
| | Biotin Mouse IgG1, κ Isotype Ctrl | MOPC-21 | FC, ICFC |



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