Product Data Sheet

PerCP/Cy5.5 anti-human CD8a

Catalog # / Size: 2104620 / 100 tests

2104615 / 25 tests

Clone: HIT8a

Isotype: Mouse IgG1, κ

Reactivity: Human

Preparation: The antibody was purified by affinity

chromatography, and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated

antibody.

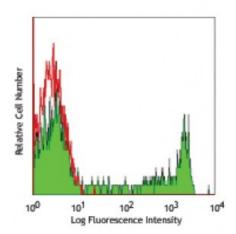
Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Workshop Number: V CD08.10

Concentration: Lot-specific



Human peripheral blood lymphocytes stained with HIT8a PerCP/Cy5.5

Applications:

Applications: Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

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^{5,6}. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue.

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. Awasthi, S., et al. 2011. J. Virol 85:10472. PubMed

5. Coppieters KT, et al. 2012. J. Exp. Med. 209:51. (IHC, epitope)

6. 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 α_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.