SONY

Product Data Sheet

APC/Cyanine7 anti-human CD8a

Catalog # / Size: 2104630 / 100 tests
2104625 / 25 tests

Clone: HIT8a

Isotype: Mouse IgG1, κ

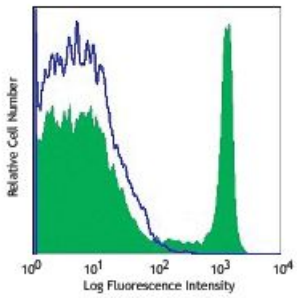
Reactivity: Human, Non-human primate

Preparation: The antibody was purified by affinity chromatography and conjugated with APC/Cy7 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Workshop Number: V CD08.10

Concentration: Lot-specific

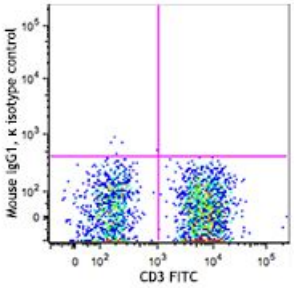


Human peripheral blood lymphocytes stained with HIT8a APC/Cy7

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 µl to 5 µl per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



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)

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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.

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