Product Data Sheet

Purified anti-human CD8a

Catalog # / Size: 2105010 / 100 μg

Clone: RPA-T8

Isotype: Mouse IgG1, κ

Reactivity: Human

Preparation: The antibody was purified by affinity

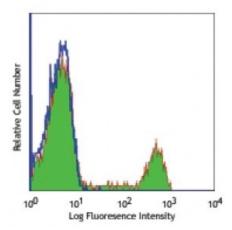
chromatography.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Workshop Number: IV T171

Concentration: 0.5



Human peripheral blood lymphocytes stained with purified RPA-T8, followed by anti-mouse IgGs FITC

Applications:

Applications: Flow Cytometry, Immunohistochemistry

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 ≤2.0 microg per million cells in 100 microL volume. It is

this reagent is ≤2.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each

application.

Application Notes:

The RPA-T8 antibody does not block the binding of HIT8a antibody to CD8a. Additional reported applications of this antibody (for the relevant formats) include: immunohistochemical staining of paraformaldehyde-fixed frozen sections3 and costimulation of T cell responses4. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue. The LEAF $^{\rm IM}$ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 301018).

Application References:

1. Knapp W, et al. Eds. 1989. Leucocyte Typing IV. Oxford University Press. New

York.

2. Schlossman S, et al. Eds. 1995. Leucocyte Typing V. Oxford University Press.

New York.

3. Mack CL, et al. 2004. Pediatr. Res. 56:79. (IHC)

4. Magidovich E, et al. 2007. P. Natl. Acad. Sci. USA 104:13022.

5. Thakarl D, et al. 2008. J. immunol. 180:7431. PubMed

5. Kmieciak M, et al. 2009. J. Transl. Med. 7:89. (FC) PubMed

6. Thakral D, et al. 2008. J. Immunol. 180:7431. (FC) PubMed

7. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC)

8. Rout N, et al. 2010. PLoS One 5:e9787. (FC)

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.