

## FITC anti-human CD8a

**Catalog # / Size:** 301005 / 25 tests  
301006 / 100 tests

**Clone:** RPA-T8

**Isotype:** Mouse IgG1,  $\kappa$

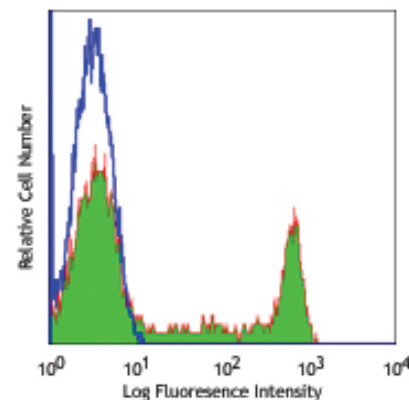
**Workshop Number:** IV T171

**Reactivity:** Human, **Cross-Reactivity:** Chimpanzee, Baboon, Cynomolgus, Rhesus, Pigtailed Macaque, Sooty Mangabey

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes stained with RPA-T8 FITC

## Applications:

**Applications:** FC - Quality tested

**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  $\mu$ l to 5  $\mu$ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**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 sections<sup>3</sup> and costimulation of T cell responses<sup>4</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for functional assays (Cat. No. 301018).

- Application References:**
- Knapp W, *et al.* Eds. 1989. Leucocyte Typing IV. Oxford University Press. New York.
  - Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York.
  - Mack CL, *et al.* 2004. *Pediatr. Res.* 56:79. (IHC)
  - Magidovich E, *et al.* 2007. *P. Natl. Acad. Sci. USA* 104:13022.
  - Thakral D, *et al.* 2008. *J. Immunol.* 180:7431. PubMed
  - Kmieciak M, *et al.* 2009. *J. Transl. Med.* 7:89. (FC) PubMed
  - Thakral D, *et al.* 2008. *J. Immunol.* 180:7431. (FC) PubMed
  - Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
  - 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  $\alpha_3$  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.

### Related Products:

Product	Clone	Application
FITC anti-human CD3	HIT3a	FC
FITC anti-human CD8a	HIT8a	FC
FITC anti-human CD4	RPA-T4	FC
FITC anti-human CD3	UCHT1	FC
FITC Mouse IgG1, $\kappa$ Isotype Ctrl	MOPC-21	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
FITC anti-human CD56 (NCAM)	MEM-188	FC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.