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Product Data Sheet

APC/Cy7 anti-human CD8a

Catalog # / Size: 301015 / 25 tests
301016 / 100 tests

Clone: RPA-T8

Isotype: Mouse IgG1, κ

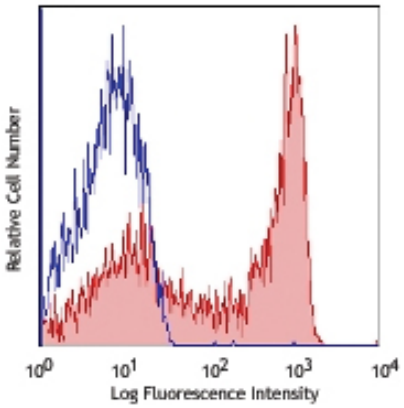
Workshop Number: IV T171

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

Preparation: The antibody was purified by affinity chromatography, and conjugated with APC/Cy7 under optimal conditions. The solution is free of unconjugated APC/Cy7 and unconjugated antibody.

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

Storage: The CD8a 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 APC/Cy7

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 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. Read more at 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[3] and costimulation of T cell responses[4]. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 301018).

Cy3, Cy5, Cy5.5 and Cy7 are subject to proprietary rights of GE Healthcare Bio-Sciences Corp. and Carnegie Mellon University and made and sold under license from GE Healthcare Bio-Sciences Corp. Sale of this product is licensed for research use only.

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.

Related Products:

Product	Clone	Application
APC anti-human CD8a	HIT8a	FC
APC anti-human CD3	UCHT1	FC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
APC anti-human CD56 (NCAM)	MEM-188	FC
APC/Cy7 anti-human CD3	HIT3a	FC
APC/Cy7 Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC
APC/Cy7 anti-human CD4	RPA-T4	FC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC

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