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# Product Data Sheet

## APC/Cy7 anti-human CD8

**Catalog # / Size:** 344713 / 25 tests
344714 / 100 tests

**Clone:** SK1

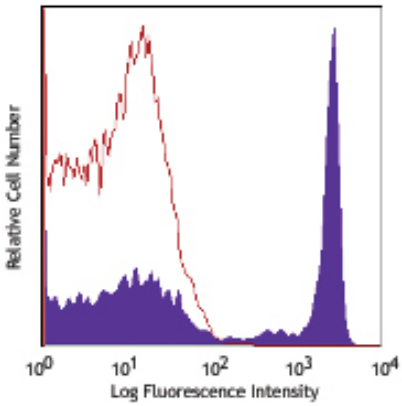
**Isotype:** Mouse IgG1, κ

**Reactivity:** Human, **Cross-Reactivity:** African Green, Chimpanzee, Cynomolgus, Pigtailed Macaque, Rhesus, 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 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 SK1 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:** Additional reported applications (for the relevant formats) include: immunohistochemistry of acetone-fixed frozen tissue sections and formalin-fixed paraffin-embedded sections[6,7], and immunoprecipitation.

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. Ledbetter JA, *et al.* 1981. *J. Exp. Med.* 153:310.
2. Campanelli R, *et al.* 2002. *Intl. Immunol.* 14:39.
3. Evans RL, *et al.* 1981. *Immunol.* 78:544.
4. Wooldridge L, *et al.* 2005. *J. Bio. Chem.* 280:27491.
5. Ch'el IL, *et al.* 2011. *J Exp Med.* 208:633. PubMed
6. Carbone A, *et al.* 1999. *Blood* 93:2319. (IHC)
7. Ahmed A, *et al.* 2001. *J. Pathol.* 193:383. (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 $\alpha_3$ domain of MHC class I and the cytoplasmic CXCP motif binds the tyrosine kinase p56 Lck.Clone SK1 recognizes the a chain of CD8.

**Antigen References:**
1. Barclay N, *et al.* 1993. *The Leucocyte Antigen FactsBook.* Academic Press Inc. San Diego.

**Related Products:**

| Product | Clone | Application |
|---|---|---|
| APC/Cy7 Mouse IgG1, κ Isotype Ctrl | MOPC-21 | FC, ICFC |
| Cell Staining Buffer | | FC, ICC, ICFC |
| RBC Lysis Buffer (10X) | | FC, ICFC |
| Human TruStain FcX™ (Fc Receptor Blocking Solution) | | FC, ICC, ICFC |

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