

**APC/Cy7 anti-human CD8**

**Catalog # / Size:** 2323570 / 100 tests  
2323565 / 25 tests

**Clone:** SK1

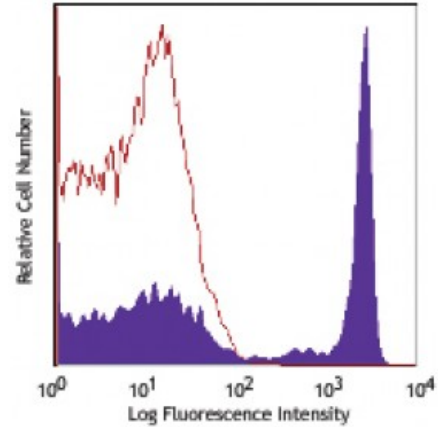
**Isotype:** Mouse IgG1,  $\kappa$

**Reactivity:** Human

**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).

**Concentration:** Lot-specific



Human peripheral blood lymphocytes stained with SK1 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 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Clone SK1 recognizes the a chain of CD8. Additional reported applications (for the relevant formats) include: immunohistochemistry of acetone-fixed frozen tissue sections and formalin-fixed paraffin-embedded sections<sup>6,7</sup>. This clone was tested in-house and does not demonstrate utility for formalin-fixed paraffin-embedded (FFPE) human tonsil sections. However, there are references cited that indicate that this clone has been used successfully in other FFPE applications<sup>6,7</sup>.

- 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.

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

**References:** San Diego.