

PE/Fire™ 700 anti-human CD8

Catalog # / 2323825 / 25 tests
Size: 2323830 / 100 tests

Clone: SK1

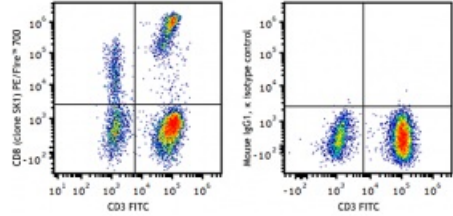
Isotype: Mouse IgG1, κ

Reactivity: Human, Non-human primate

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Fire™ 700 under optimal conditions.

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 were stained with anti-human CD3 FITC and anti-human CD8 PE/Fire™ 700 (clone SK1) (left), or mouse IgG1, κ PE/Fire™ 700 (right).

Applications:

Applications: Flow Cytometry

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 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PE/Fire™ 700 has a maximum excitation of 565 nm and a maximum emission of 695 nm.

Application Notes: Clone SK1 recognizes the a chain of CD8. Additional reported applications (for the relevant formats) include: proteogenomics⁸, immunohistochemistry of acetone-fixed frozen tissue sections. This clone was tested in-house and does not demonstrate utility for formalin-fixed paraffin-embedded (FFPE) human tonsil sections.

- 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-F)
 7. Ahmed A, et al. 2001. *J. Pathol.* 193:383. (IHC)
 8. Peterson VM, et al. 2017. *Nat. Biotechnol.* 35:936. (PG)

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