SONY

Product Data Sheet

Pacific Blue™ anti-human CD8

Catalog # / Size: 2323585 / 25 tests
2323590 / 100 tests

Clone: SK1

Isotype: Mouse IgG1, κ

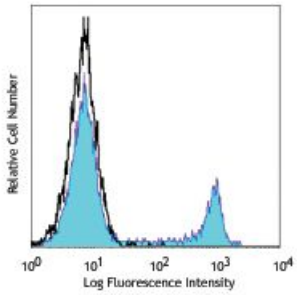
Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions.

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

Workshop Number: HCDM listed

Concentration: Lot-specific



Human peripheral blood lymphocytes stained with SK1 Pacific Blue™

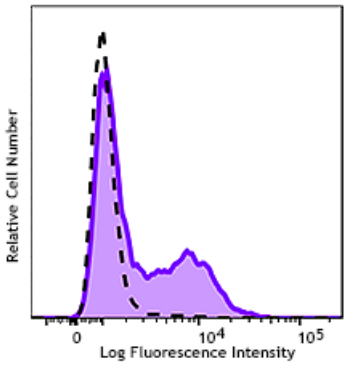
Applications:

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 or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

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[6,7]. 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[6,7].



Human T leukemia cell line Jurkat treated (filled histogram) or non-treated (open histogram) with anti-human CD95 (Fas) 4 hours, fixed with Fixation Buffer (Cat No. 420801), permeabilized with True-Phos™ Perm Buffer (Cat No. 425401), then stained with anti-Cleaved PARP (Asp214) recombinant (clone QA17A17) PE/Cyanine7.

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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 References:

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

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