

Brilliant Violet 750™ anti-human CD8

Catalog # / Size: 2323780 / 100 tests
2323775 / 25 tests

Clone: SK1

Isotype: Mouse IgG1, κ

Immunogen: Cultured human thymic epithelial cells

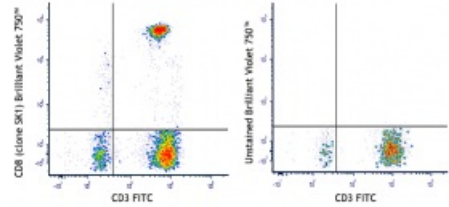
Reactivity: Human, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 750™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 750™ and unconjugated antibody.

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 were stained with CD8 (clone SK1) Brilliant Violet 750™ and CD3 FITC (left) or with CD3 FITC only (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.

Brilliant Violet 750™ excites at 405 nm and emits at 750 nm. The bandpass filter 780/60 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 750™ is a trademark of Sirigen Group Ltd.

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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)
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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.