Brilliant Violet 711™ anti-human CD8

Catalog # / Size: 2323665 / 25 tests

2323670 / 100 tests

Clone: SK1

Isotype: Mouse IgG1, κ

Reactivity: Human

Preparation: The antibody was purified by affinity

chromatography and conjugated with Brilliant Violet 711™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 711™ and

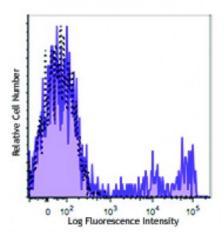
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD8 (clone SK1) Brilliant Violet 711[™] (filled histogram) or mouse IgG1, κ Brilliant Violet 711[™] isotype control (open histogram).

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

Brilliant Violet 711^{TM} excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 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 711^{TM} 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: 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}.

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 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.