

Brilliant Violet 750™ anti-mouse CD8a Antibody

Catalog# / Size 162321 / 50 µg

Clone S18018E

Regulatory Status RUO

Other Names T8, Lyt2, Ly-2

Isotype Rat IgG2b, λ

Description CD8, also known as Lyt-2, Ly-2, or T8, consists of disulfide-linked α and β chains that form the α(CD8a)/β(CD8b) heterodimer and α/α homodimer. CD8a is a 34 kD protein that belongs to the immunoglobulin family. The CD8 α/β heterodimer is expressed on the surface of most thymocytes and a subset of mature TCR α/β T cells. CD8 expression on mature T cells is non-overlapping with CD4. The CD8 α/α homodimer is expressed on a subset of γ/δ TCR-bearing T cells, NK cells, intestinal intraepithelial lymphocytes, and lymphoid dendritic cells. CD8 is an antigen co-receptor on T cells that interacts with MHC class I on antigen-presenting cells or epithelial cells. CD8 promotes T cell activation through its association with the TCR complex and protein tyrosine kinase lck.

Product Details

Verified Reactivity Mouse

Antibody Type Monoclonal

Host Species Rat

Immunogen Recombinant mouse CD8a

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

Preparation The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 750™ under optimal conditions.

Concentration 0.2 mg/mL

Storage & Handling The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze.**

Application [FC - Quality tested](#)

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 ≤ 0.06 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.

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.

[Learn more about Brilliant Violet™.](#)

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Excitation Laser Violet Laser (405 nm)

Antigen Details

Structure	Ig superfamily, CD8 α chain, 34 kD
Distribution	Most thymocytes, T cell subset, some NK cells, lymphoid dendritic cells
Function	Co-receptor for TCR
Ligand/Receptor	MHC class I molecule
Cell Type	Dendritic cells, NK cells, T cells, Thymocytes, Tregs
Biology Area	Immunology
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. Ledbetter JA, <i>et al.</i> 1979. <i>Immunol. Rev.</i> 47:63. (IHC, IP) 2. Hathcock KS. 1991. <i>Current Protocols in Immunology</i>. 3.4.1. (Deplete) 3. Takahashi K, <i>et al.</i> 1992. <i>P. Natl. Acad. Sci. USA</i> 89:5557. (Block, IP) 4. Ledbetter JA, <i>et al.</i> 1981. <i>J. Exp. Med.</i> 153:1503. (Block) 5. Hata H, <i>et al.</i> 2004. <i>J. Clin. Invest.</i> 114:582. (IHC) 6. Fan WY, <i>et al.</i> 2001. <i>Exp. Biol. Med.</i> 226:1045. (IHC) 7. Shih FF, <i>et al.</i> 2006. <i>J. Immunol.</i> 176:3438. (FC) 8. Kamimura D, <i>et al.</i> 2006. <i>J. Immunol.</i> 177:306. 9. Bower HGA, <i>et al.</i> 2006. <i>P. Natl. Acad. Sci. USA</i> 103:5102. (FC, Deplete) 10. Kao C, <i>et al.</i> 2005. <i>Int. Immunol.</i> 17:1607. PubMed 11. Ko SY, <i>et al.</i> 2005. <i>J. Immunol.</i> 175:3309. (FC) PubMed 12. Rasmussen JW, <i>et al.</i> 2006. <i>Infect. Immun.</i> 74:6590
Gene ID	12525

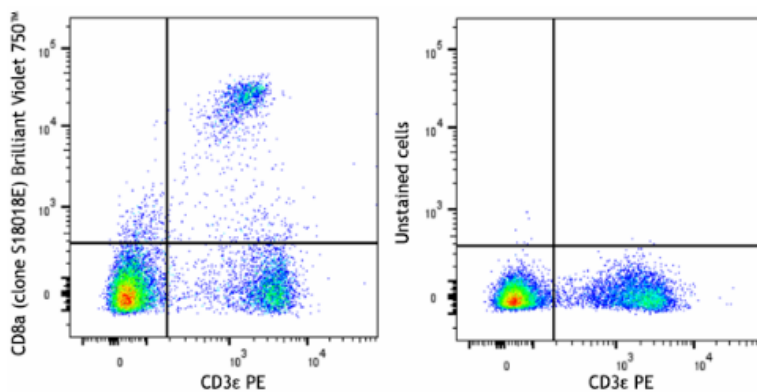
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-mouse CD8a Antibody, PE anti-mouse CD8a, APC anti-mouse CD8a, APC/Fire™ 750 anti-mouse CD8a , PerCP/Cyanine5.5 anti-mouse CD8a, PE/Cyanine7 anti-mouse CD8a, FITC anti-mouse CD8a, Brilliant Violet 421™ anti-mouse CD8a, PerCP/Fire™ 806 anti-mouse CD8a, PerCP/Fire™ 780 anti-mouse CD8a Antibody, Brilliant Violet 750™ anti-mouse CD8a Antibody

Product Data



C57BL/6 mouse splenocytes were stained with anti-mouse CD3 ϵ (clone 145-2C11) PE and anti-mouse CD8a (clone S18018E) Brilliant Violet 750™ (left) or stained with anti-mouse CD3 ϵ (clone 145-2C11) PE only (right).

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