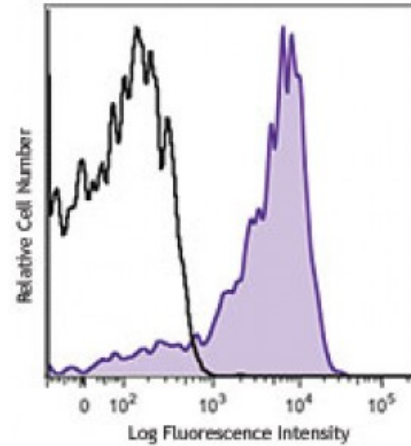


Brilliant Violet 421™ anti-mouse CD150 (SLAM)

Catalog # / Size: 1179625 / 125 µl
 1179630 / 500 µl
 1179715 / 50 µg
Clone: TC15-12F12.2
Isotype: Rat IgG2a, λ
Immunogen: Mouse SLAM-human IgG1 fusion protein
Reactivity: Mouse
Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.
Formulation: microL sizes: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA). microg size: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Concentration: microL sizes: lot-specific



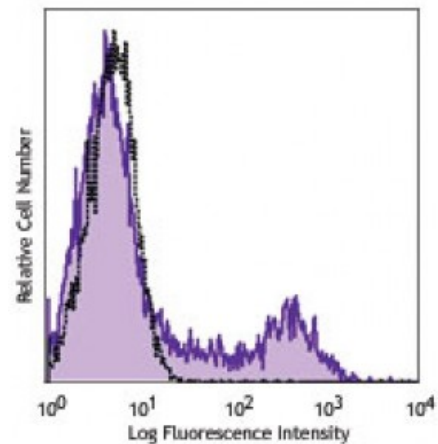
C57BL/6 mouse splenocytes were stained with SLAM (clone TC15-12F12.2) Brilliant Violet 421™ (filled histogram) or rat IgG2a, κ Brilliant Violet 421™ isotype control (open histogram).

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 using the microL sizes, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. For flow cytometric staining using the microg size, the suggested use of this reagent is ≤0.125 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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C57BL/6 mouse bone marrow cells were stained with SLAM (clone TC15-12F12.2) Brilliant Violet 421™ (filled histogram) or rat IgG2a, κ Brilliant Violet 421™ isotype control (open histogram). Data shown was gated on the lymphoid cell popula

purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

Application Notes: The TC15-12F12.2 antibody has been reported to enhance the production of IFN- γ by Th1 cells stimulated through TCR. Additional reported applications (for the relevant formats) include: immunoprecipitation¹, enhancing IFN- γ production by Th1 cells when stimulated with CD31, and inhibiting CD3 induced T cell proliferation⁶. The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 115906).

Application References:

1. Castro AG, *et al.* 1999. *J. Immunol.* 163:5860. (FC, Costim, IP)
2. Forsberg EC, *et al.* 2005. *PLoS Genet.* 1:e28. (FC)
3. Terrazas LI, *et al.* 2005. *Int. J. Parasitol.* 35:1349. (FC)
4. Cannons JL, *et al.* 2006. *J. Exp. Med.* 203:1551. (FC)
5. Umemoto T, *et al.* 2006. *J. Immunol.* 177:7733. (FC)
6. Jordan MA, *et al.* 2007. *J. Immunol.* 178:1618. (FC, Block) [PubMed](#)
7. Jung Y, *et al.* 2007. *Blood* 110:82. [PubMed](#)
8. Pimanda JE, *et al.* 2007. *Proc. Natl. Acad. Sci. USA* 104:840.
9. Sugiyama T, *et al.* 2007. *Proc. Natl. Acad. Sci. USA* 104:175.
10. Kim I, *et al.* 2006. *Blood* 108:737. [PubMed](#)
11. Ema H, *et al.* 2006. *Nat Protoc.* 1:2979. [PubMed](#)
12. Fraser ST, *et al.* 2007. *Blood* 109:4616. [PubMed](#)
13. Jung Y, *et al.* 2008. *Stem Cells.* 26:2042. [PubMed](#)
14. Song J, *et al.* 2010. *Blood* 115:2592. [PubMed](#)
15. Cridland SO, *et al.* 2009. *Blood Cell. Mol. Dis.* 43:149. (FC) [PubMed](#)
16. Morita Y, *et al.* 2010. *J. Exp Med.* 207:1173. [PubMed](#)

Description: CD150 is a 75-95 kD member of the immunoglobulin superfamily, also known as SLAM (signaling lymphocyte activation molecule) or IPO-3. CD150, a single chain type I transmembrane molecule, is expressed on thymocytes, T cell subsets, B cells, dendritic cells, and endothelial cells. The expression is upregulated upon activation. CD150 expression has been shown to be maintained on Th1 but not Th2 clones. T regulatory cells express a relatively high level of CD150. Antibodies against CD150 have been shown to augment IFN- γ production by Th1 cells, especially when co-stimulated through the TCR. CD150 associates with the src homology 2-domain-containing protein tyrosine phosphatase SHP-2, and this association is thought to be involved in signal transduction. In combination with CD48, CD150 is a useful marker for hematopoietic stem cell studies.

Antigen References:

1. Cocks BG, *et al.* 1995. *Nature* 376:260.
2. Punnonen J, *et al.* 1997. *J. Exp. Med.* 185:993.
3. Sidorenko SP, *et al.* 1993. *J. Immunol.* 151:4614.