SONY

Product Data Sheet

Brilliant Violet 650™ anti-mouse CD150 (SLAM)

Catalog # / Size: 1179655 / 125 µl
1179660 / 50 µg

Clone: TC15-12F12.2

Isotype: Rat IgG2a, λ

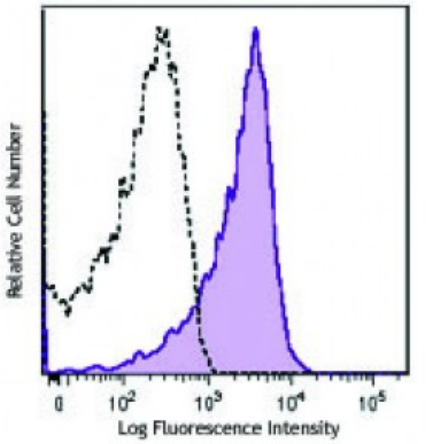
Immunogen: Mouse SLAM-human IgG1 fusion protein

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 650™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 650™ and unconjugated antibody.

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

Concentration: Lot-specific



C57BL/6 mouse splenocytes were stained with CD150 (clone TC15-12F12.2) Brilliant Violet 650™ (filled histogram) or rat IgG2a Brilliant Violet 650™ isotype control (open histogram).

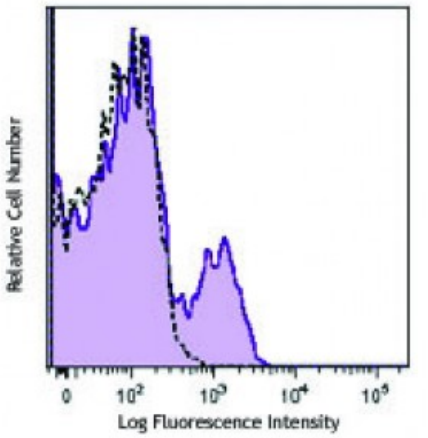
Applications:

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 size, 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 ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 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 650™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and



C57BL/6 mouse bone marrow cells were stained with CD150 (clone TC15-12F12.2) Brilliant Violet 650™ (filled histogram) or rat IgG2a Brilliant Violet 650™ isotype control (open histogram). Data shown was gated on lymphoid cell population.

sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research 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: immunoprecipitaion1, enhancing IFN-γ production by Th1 cells when stimulated with CD31, and inhibiting CD3 induced T cell proliferation[6]. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm 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.