

**Alexa Fluor® 488 anti-mouse CD150 (SLAM)**

**Catalog # / Size:** 1179575 / 25 µg  
1179580 / 100 µg

**Clone:** TC15-12F12.2

**Isotype:** Rat IgG2a, λ

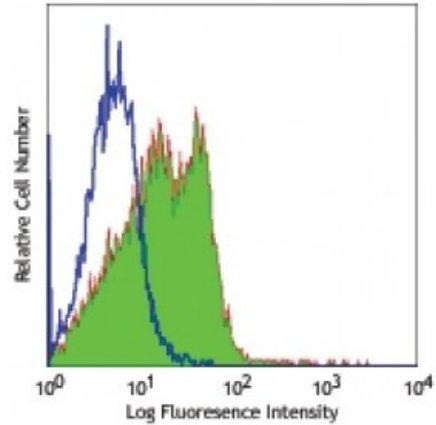
**Immunogen:** Mouse SLAM-human IgG1 fusion protein

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5



C57BL/6 mouse splenocytes were stained with CD150 (clone TC15-12F12.2) Alexa Fluor® 488 (filled histogram) or rat IgG2a Alexa Fluor® 488 isotype control (open histogram).

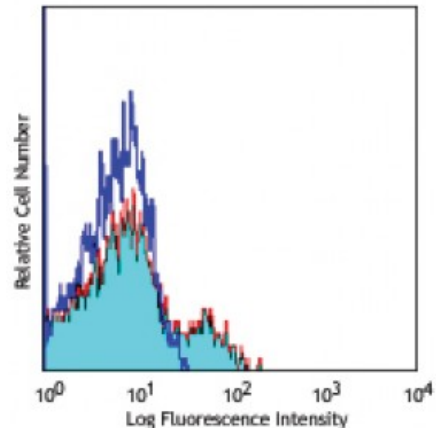
**Applications:**

**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 ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

**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: immunoprecipitation<sup>1</sup>, enhancing IFN-γ production by Th1 cells when stimulated with CD31, and inhibiting CD3 induced T cell proliferation<sup>6</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 115906).



C57BL/6 mouse bone marrow cells were stained with CD150 (clone TC15-12F12.2) Alexa Fluor® 488 (filled histogram) or rat IgG2a Alexa Fluor® 488 isotype control (open histogram) (gated on lymphoid cell population).

- 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](#)
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**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- $\gamma$  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.