## Purified anti-mouse CD150 (SLAM)

**Catalog # / Size:** 1179505 / 50 μg

1179510 / 500 μg

Clone: TC15-12F12.2 Isotype: Rat IgG2a,  $\lambda$ 

Immunogen: Mouse SLAM-human IgG1 fusion protein

Reactivity: Mouse

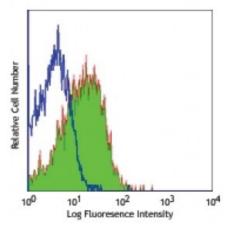
Preparation: The antibody was purified by affinity

chromatography.

**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

**Concentration:** 0.5



C57BL/6 mouse splenocytes were stained with purified CD150 (clone TC15-12F12.2) (filled histogram) or rat IgG2a isotype control (open histogram), followed by anti-rat IgG FITC.

## **Applications:**

**Applications:** Other

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  $\leq$ 0.25 microg per million cells in 100 microL volume. It is

recommended that the reagent be titrated for optimal performance for each

application.

**Application** 

Notes:

The TC15-12F12.2 antibody has been reported to enhance the production of IFN- $\gamma$  by Th1 cells stimulated through TCR. Additional reported applications (for the relevant formats) include: immunoprecipitaion1, enhancing IFN- $\gamma$  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).

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- $\gamma$  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.