Product Data Sheet

PE anti-mouse CD150 (SLAM)

Catalog # / Size: $1179515 / 25 \mu g$

1179520 / 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

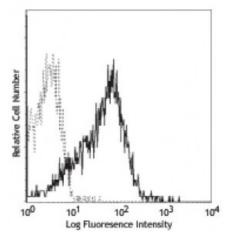
chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2



C57BL/6 mouse splenocytes were stained with CD150 (clone TC15-12F12.2) PE (solid line) or rat IgG2a PE isotype control (broken line).

Applications:

Applications: Flow Cytometry

Recommended

Application

Notes:

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

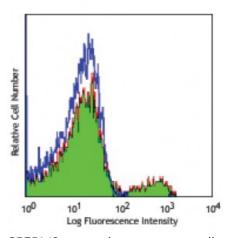
volume. It is recommended that the reagent be titrated for optimal performance for each application.

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

cell proliferation⁶. The LEAFTM purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 115906).

production by Th1 cells when stimulated

with CD31, and inhibiting CD3 induced T



C57BL/6 mouse bone marrow cells were stained with CD150 (clone TC15-12F12.2) PE (filled histogram) or rat IgG2a PE 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
- 17. Grassinger J, et al. 2012. Cytokine. 58:518. PubMed
- 18. Du J, et al. 2012. Stem Cells. 30:1447. PubMed
- 19. Theocharides AP, et al. 2012. J Exp Med. 209:1883. PubMed
- 20. Chiba H, et al. 2013. Am J Phyciol Cell Physiol. 305:693. PubMed
- 21. Maltby S, et al. 2014. J Immunol. 193:4072. PubMed
- 22. Hu W, et al. 2015 Blood. 125:2206. 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.