

## Anti-Mouse CD150 Antibody, Clone TC15-12F12.2



Scientists Helping Scientists™ | [WWW.STEMCELL.COM](http://WWW.STEMCELL.COM)

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

[INFO@STEMCELL.COM](mailto:INFO@STEMCELL.COM) • [TECHSUPPORT@STEMCELL.COM](mailto:TECHSUPPORT@STEMCELL.COM)

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

## Antibodies

Rat monoclonal IgG2a antibody  
against mouse CD150 (SLAM),  
unconjugated

Catalog #60036  
#60036.1

500 µg 0.5 mg/mL  
50 µg 0.5 mg/mL

## Product Description

The TC15-12F12.2 antibody reacts with CD150 (signaling lymphocyte activation molecule or SLAM), an ~75 kDa type I transmembrane glycoprotein that plays multiple roles in the immune response by serving as a cell adhesion molecule and/or coreceptor. It is differentially expressed by T cells, immature thymocytes, B cells, dendritic cells, macrophages, and endothelial cells. The expression pattern differs according to cell type and activation status. Expression is rapidly induced upon activation of T cells, B cells, and dendritic cells, with synthesis by T cells being maintained on Th1 but not Th2 clones. CD150-mediated co-stimulation of TCR-activated T cells enhances the production of IFN- $\gamma$  by Th1 cells, a response that can be augmented by binding of the TC15-12F12.2 antibody. CD150 is thought to mediate signal transduction by associating with the intracellular protein tyrosine phosphatase, SHP-2. CD150 also has functions in hematopoietic cell development and is a useful marker for detection of multipotent hematopoietic stem cells (in concert with other markers such as CD48 and CD41). CD150 is not expressed on non-multipotent hematopoietic progenitor cells.

Target Antigen Name:	CD150 (SLAM)
Alternative Names:	IPO-3, Signaling lymphocyte activation molecule
Gene ID:	27218
Species Reactivity:	Mouse
Host Species:	Rat (LEW)
Clonality:	Monoclonal
Clone:	TC15-12F12.2
Isotype:	IgG2a, lambda
Immunogen:	Mouse SLAM-human IgG1 fusion protein
Conjugate:	Unconjugated

## Applications

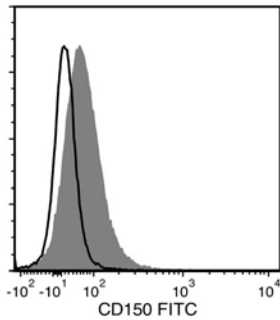
Verified:	FC
Reported:	FA, FC, IP

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

## Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact <a href="mailto:techsupport@stemcell.com">techsupport@stemcell.com</a> .
Directions for Use:	For flow cytometry, the suggested use of this antibody is $\leq 0.25$ µg per $1 \times 10^6$ cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

## Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD150 Antibody, Clone TC15-12F12.2, followed by a mouse anti-rat IgG2a antibody, FITC (filled histogram), or a rat IgG2a isotype control antibody, followed by a mouse anti-rat IgG2a antibody, FITC (solid line histogram).

## Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, visit [www.stemcell.com/antibodies](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

1. Morita Y et al. (2010) Heterogeneity and hierarchy within the most primitive hematopoietic stem cell compartment. *J Exp Med* 207(6): 1173–82.
2. Song J et al. (2010) An in vivo model to study and manipulate the hematopoietic stem cell niche. *Blood* 115(13): 2592–600.
3. Yusuf I et al. (2010) Germinal center T follicular helper cell IL-4 production is dependent on signaling lymphocytic activation molecule receptor (CD150). *J Immunol* 185(1): 190–202. (FC)
4. Fraser ST et al. (2007) Maturation and enucleation of primitive erythroblasts during mouse embryogenesis is accompanied by changes in cell-surface antigen expression. *Blood* 109(1): 343–52.
5. Jordan MA et al. (2007) Slamf1, the NKT cell control gene Nkt1. *J Immunol* 178(3): 1618–27. (FA, FC)
6. Sugiyama T et al. (2007) Conserved markers of fetal pancreatic epithelium permit prospective isolation of islet progenitor cells by FACS. *Proc Natl Acad Sci USA* 104(1): 175–80.
7. Ema H et al. (2006) Adult mouse hematopoietic stem cells: purification and single-cell assays. *Nat Protoc* 1(6): 2979–87.
8. Umemoto T et al. (2006) Expression of Integrin beta3 is correlated to the properties of quiescent hemopoietic stem cells possessing the side population phenotype. *J Immunol* 177(11): 7733–9. (FC)
9. Forsberg EC et al. (2005) Differential expression of novel potential regulators in hematopoietic stem cells. *PLoS Genet* 1(3): e28. (FC)
10. Castro AG et al. (1999) Molecular and functional characterization of mouse signaling lymphocytic activation molecule (SLAM): differential expression and responsiveness in Th1 and Th2 cells. *J Immunol* 163(11): 5860–70. (FA, FC, IP)
11. Punnonen J et al. (1997) Soluble and membrane-bound forms of signaling lymphocytic activation molecule (SLAM) induce proliferation and Ig synthesis by activated human B lymphocytes. *J Exp Med* 185(6): 993–1004.
12. Cocks BG et al. (1995) A novel receptor involved in T-cell activation. *Nature* 376(6537): 260–3.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2018 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists, and StemSpan are trademarks of STEMCELL Technologies Canada Inc. All other trademarks are the property of their respective holders. Alexa Fluor is a registered trademark of Life Technologies Corporation. Antibodies conjugated to Alexa Fluor® are licensed for internal research use only and sale is expressly conditioned on the buyer not using the antibody for manufacturing, performing a service or medical test, or otherwise generating revenue. For use other than research, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or [outlicensing@lifetech.com](mailto:outlicensing@lifetech.com). While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.