

Ultra-LEAF™ Purified anti-mouse CD150 (SLAM) Antibody

Catalog# / Size	115949 / 100 µg 115950 / 1 mg
Clone	TC15-12F12.2
Regulatory Status	RUO
Other Names	Signaling Lymphocyte Activation Molecule (SLAM), IPO-3
Isotype	Rat IgG2a, λ
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.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse SLAM-human IgG1 fusion protein
Formulation	0.2 µm filtered in phosphate-buffered solution, pH 7.2, containing no preservative. Endotoxin level is < 0.01 EU/µg of the protein (< 0.001 ng/µg of the protein) as determined by the LAL test.
Concentration	The antibody is bottled at the concentration indicated on the vial, typically between 2 mg/mL and 3 mg/mL. Older lots may have also been bottled at 1 mg/mL. To obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. This Ultra-LEAF™ solution contains no preservative; handle under aseptic conditions.
Application	FC - Quality tested IP, Costim, Block - Reported in the literature, not verified in house
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 ≤ 1.0 µg per million cells in 100 µL 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-γ by Th1 cells stimulated through TCR. Additional reported applications (for the relevant formats) include: immunoprecipitation ¹⁷ , enhancing IFN-γ production by Th1 cells when stimulated with CD3 ¹ , and inhibiting CD3 induced T cell proliferation ⁶ . The Ultra-LEAF™ purified antibody (Endotoxin <0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 115949 & 115950).
Application References (PubMed link indicates BioLegend citation)	<ol style="list-style-type: none"> 1. Castro AG, <i>et al.</i> 1999. <i>J. Immunol.</i> 163:5860. (FC, Costim, IP) 2. Forsberg EC, <i>et al.</i> 2005. <i>PLoS Genet.</i> 1:e28. (FC) 3. Terrazas LI, <i>et al.</i> 2005. <i>Int. J. Parasitol.</i> 35:1349. (FC) 4. Cannons JL, <i>et al.</i> 2006. <i>J. Exp. Med.</i> 203:1551. (FC) 5. Umemoto T, <i>et al.</i> 2006. <i>J. Immunol.</i> 177:7733. (FC) 6. Jordan MA, <i>et al.</i> 2007. <i>J. Immunol.</i> 178:1618. (FC, Block) PubMed 7. Jung Y, <i>et al.</i> 2007. <i>Blood</i> 110:82. PubMed

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RRID AB_2832395 (BioLegend Cat. No. 115949)
 AB_2832396 (BioLegend Cat. No. 115950)

Antigen Details

Structure	Ig superfamily, 75-95 kD
Distribution	Thymocytes, T cell subset, B lymphocytes, dendritic cells, endothelial cells
Function	B cell and dendritic cell costimulation
Ligand/Receptor	CD150
Cell Type	B cells, Dendritic cells, Endothelial cells, T cells, Thymocytes, Tregs
Biology Area	Costimulatory Molecules, Immunology, Innate Immunity
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	1. Cocks BG, <i>et al.</i> 1995. <i>Nature</i> 376:260. 2. Punnonen J, <i>et al.</i> 1997. <i>J. Exp. Med.</i> 185:993. 3. Sidorenko SP, <i>et al.</i> 1993. <i>J. Immunol.</i> 151:4614.
Gene ID	27218

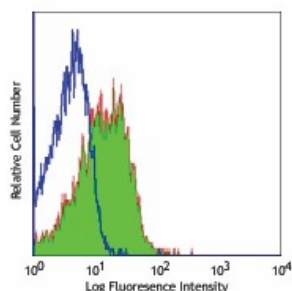
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-mouse CD150 (SLAM), PE anti-mouse CD150 (SLAM), Biotin anti-mouse CD150 (SLAM), APC anti-mouse CD150 (SLAM), PE/Cyanine5 anti-mouse CD150 (SLAM), PE/Cyanine7 anti-mouse CD150 (SLAM), Alexa Fluor® 488 anti-mouse CD150 (SLAM), Alexa Fluor® 647 anti-mouse CD150 (SLAM), PerCP/Cyanine5.5 anti-mouse CD150 (SLAM), Pacific Blue™ anti-mouse CD150 (SLAM), Brilliant Violet 421™ anti-mouse CD150 (SLAM), Brilliant Violet 605™ anti-mouse CD150 (SLAM), Brilliant Violet 510™ anti-mouse CD150 (SLAM), Brilliant Violet 650™ anti-mouse CD150 (SLAM), Purified anti-mouse CD150 (SLAM) (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse CD150 (SLAM), Brilliant Violet 785™ anti-mouse CD150 (SLAM), APC/Fire™ 750 anti-mouse CD150 (SLAM), Brilliant Violet 711™ anti-mouse CD150 (SLAM), TotalSeq™-A0203 anti-mouse CD150 (SLAM), TotalSeq™-C0203 anti-mouse CD150 (SLAM), Ultra-LEAF™ Purified anti-mouse CD150 (SLAM), TotalSeq™-B0203 anti-mouse CD150 (SLAM)

Product Data



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

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