

Alexa Fluor[®] 647 anti-mouse CD5 Antibody

Catalog# / Size	100613 / 25 µg 100614 / 100 µg
Clone	53-7.3
Regulatory Status	RUO
Other Names	Lyt-1, Ly-1, T1, Tp67, Ly-12
Isotype	Rat IgG2a, κ
Description	CD5 is a 67 kD protein, also known as Lyt-1, Ly-1, T1, Tp67, or Ly-12. It is a member of the scavenger receptor cysteine-rich protein superfamily (SRCR) and primarily expressed on thymocytes, T cells, and B-1 cells. Although mature α/β T cells express high levels of CD5, very few γ/δ T cells express this antigen. The interaction of CD5 with CD72, gp35-37, TCR, or BCR is involved in T and B cell activation.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse thymus or spleen
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor [®] 647 under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	<p>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 µg per 10⁶ cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor[®] 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.</p> <p>Alexa Fluor[®] and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Red Laser (633 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation ¹ , and immunohistochemistry ² of acetone-fixed frozen tissue sections, zinc-fixed paraffin-embedded sections and formalin-fixed paraffin-embedded sections.
Application References	<ol style="list-style-type: none">1. Ledbetter JA, <i>et al.</i> 1979. <i>Immunol. Rev.</i> 47:63. (IP)2. Ledbetter JA, <i>et al.</i> 1980. <i>J. Exp. Med.</i> 152:280. (FC, IHC)3. Bourdeau A, <i>et al.</i> 2007. <i>Blood</i> doi:10.1182/blood-2006-08-044370.
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none">1. Kaku H, <i>et al.</i> 2014. <i>J Immunol.</i> 193:5904. PubMed2. Piper CJM, <i>et al.</i> 2020. <i>Cell Reports.</i> 29(7):1878-1892.e7.. PubMed3. Lopez DA, <i>et al.</i> 2022. <i>Cell Rep.</i> 41:111677. PubMed4. Rosser EC, <i>et al.</i> 2020. <i>Cell Metabolism.</i> 31(4):837-851. PubMed

5. Smith LK, *et al.* 2021. *Elife*. 10:. [PubMed](#)

RRID AB_493168 (BioLegend Cat. No. 100613)
AB_2075301 (BioLegend Cat. No. 100614)

Antigen Details

Structure	Member of the scavenger receptor cysteine-rich protein superfamily (SRCR), 67 kD
Distribution	Thymocytes, T cells, B-1 cells
Function	Negative regulator of T-B cell interaction
Ligand/Receptor	CD72, gp35-37
Cell Type	B cells, T cells, Thymocytes
Biology Area	Costimulatory Molecules, Immunology
Molecular Family	CD Molecules
Antigen References	1. Barclay A, <i>et al.</i> 1997. <i>The Leukocyte Antigen FactsBook</i> Academic Press. 2. Kipps T.J. 1988. <i>Adv. Immunol.</i> 47:117. 3. Antin JH, <i>et al.</i> 1985. <i>J. Immunol.</i> 136:505. 4. Tarakhovsky A, <i>et al.</i> 1995. <i>Science</i> 269:535.
Gene ID	12507

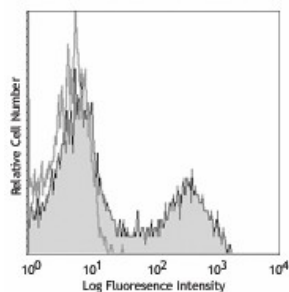
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Biotin anti-mouse CD5, FITC anti-mouse CD5, PE anti-mouse CD5, PE/Cyanine5 anti-mouse CD5, Purified anti-mouse CD5, Brilliant Violet 510™ anti-mouse CD5, Alexa Fluor® 488 anti-mouse CD5, Alexa Fluor® 647 anti-mouse CD5, PerCP anti-mouse CD5, Brilliant Violet 421™ anti-mouse CD5, PE/Cyanine7 anti-mouse CD5, Purified anti-mouse CD5 (Maxpar® Ready), PerCP/Cyanine5.5 anti-mouse CD5, APC anti-mouse CD5, Alexa Fluor® 594 anti-mouse CD5, APC/Fire™ 750 anti-mouse CD5, Alexa Fluor® 700 anti-mouse CD5, TotalSeq™-A0111 anti-mouse CD5, Brilliant Violet 711™ anti-mouse CD5, Pacific Blue™ anti-mouse CD5, PE/Dazzle™ 594 anti-mouse CD5, TotalSeq™-B0111 anti-mouse CD5, TotalSeq™-C0111 anti-mouse CD5, APC/Cyanine7 anti-mouse CD5

Product Data



C57BL/6 mouse splenocytes stained with 53-7.3 Alexa Fluor® 647

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