Purified anti-mouse CD5 Antibody

Catalog# / Size	100602 / 500 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.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - *Quality tested* IHC-F, CyTOF® - *Verified* IHC-P, IP - *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	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

(PubMed link indicates BioLegend citation)

1. Ledbetter JA, *et al.* 1979. *Immunol. Rev.* 47:63. (IP)
2. Ledbetter JA, *et al.* 1980. *J. Exp. Med.* 152:280. (FC, IHC)
3. Bourdeau A, *et al.* 2007. *Blood* doi:10.1182/blood-2006-08-044370.

Product Citations

1. Michela Miani *et al.* 2018. Cell metabolism. 28(4):557-572 . PubMed
2. Seifert HA, *et al.* 2018. Metab Brain Dis. 33:1599. PubMed
3. Khan KA, *et al.* 2020. NPJ Breast Cancer. 6:29. PubMed
4. Prado C, *et al.* 2021. J Neuroinflammation. 18:292. PubMed
5. Niss Arfelt K, *et al.* 2017. Blood. 129:866. PubMed
6. Peng V, *et al.* 2020. J Biol Chem. 295:14866. PubMed
7. Doorduijn EM, *et al.* 2018. Front Immunol. 0.416666667. PubMed
8. Khan KA, *et al.* 2020. NPJ Breast Cancer. 6:29. PubMed
9. Formaglio P, *et al.* 2021. Immunity. 54:2724. PubMed
10. Liu H, *et al.* 2020. J Immunol. 205:1207. PubMed
11. Sprouse ML, *et al.* 2018. JCI Insight. 3:e97322. PubMed
12. Lee JY, *et al.* 2018. Front Immunol. 0.678472222. PubMed
13. Yates K, *et al.* 2018. Proc Natl Acad Sci U S A. 115:2162. PubMed

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15. Parigi SM, *et al.* 2018. Sci Rep. 0.440277778. PubMed
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17. Goltsev Y *et al.* 2018. Cell. 174(4):968-981 . PubMed
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19. Cole C, *et al.* 2018. Nucleic Acids Res. 46:e62. PubMed
20. Yamashita M, *et al.* 2019. Cell Stem Cell. 25:357. PubMed
21. Kästele V, *et al.* 2021. Mucosal Immunol. 14:717. PubMed

RRID AB_312731 (BioLegend Cat. No. 100602)

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, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press. 2. Kipps TJ. 1988. *Adv. Immunol.* 47:117. 3. Antin JH, *et al.* 1985. *J. Immunol.* 136:505. 4. Tarakhovsky A, *et al.* 1995. *Science* 269:535.
Gene ID	12507

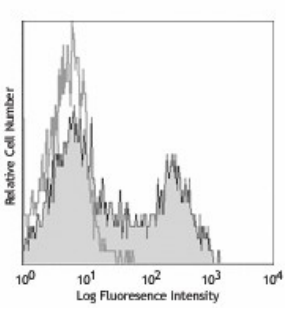
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

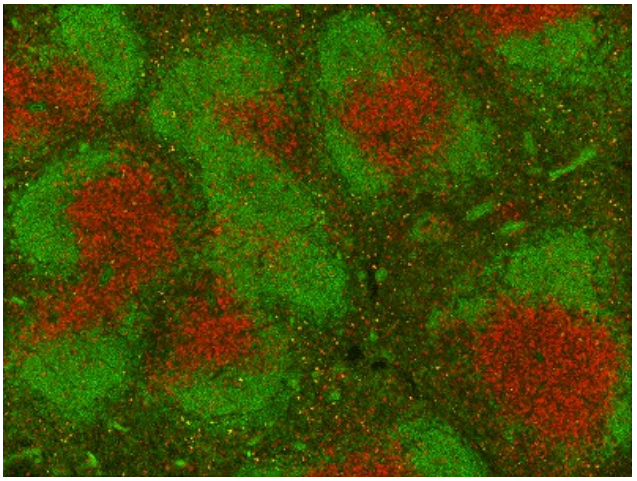
Other Formats

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 purified 53-7.3, followed by anti-rat IgGs-FITC



Fresh, frozen mouse spleen was stained with purified CD5 clone 53-7.3 conjugated and detected with a Cy3 CODEX™ oligonucleotide duplex (red). Samples were counterstained with B220 FITC (green). Data generated at Akoya Biosciences, Inc. using the CODEX™ technology.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587