

FITC anti-mouse CD4 Antibody

Catalog# / Size	116003 / 50 µg 116004 / 500 µg
Clone	RM4-4
Regulatory Status	RUO
Other Names	L3T4, T4
Isotype	Rat IgG2b, κ
Description	CD4 is a 55 kD protein, also known as L3T4 or T4. It is a member of the Ig superfamily, primarily expressed on most thymocytes and a subset of T cells, and weakly on macrophages and dendritic cells. It acts as a coreceptor with the TCR during T cell activation and thymic differentiation by binding MHC class II and associating with the protein tyrosin kinase, lck.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	BALB/c mouse thymocytes
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with FITC 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	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 million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm)
Application Notes	RM4-4 antibody does not block the binding of GK1.5 and RM4-5 antibodies to CD4 T cells. For immunohistochemistry applications, the RM4-5 (Cat. No. 100506) and GK1.5 (Cat. No. 100402) antibodies are recommended.
Application References	<ol style="list-style-type: none"> 1. Bendelac A. 1995. <i>Curr. Opin. Immunol.</i> 7:367. 2. Norian LA and Allen PM. 2004. <i>J. Immunol.</i> 173:835.
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> 1. Mackel JJ, <i>et al.</i> 2022. <i>Front Cell Infect Microbiol.</i> 12:974175. PubMed 2. Suárez-López L, <i>et al.</i> 2021. <i>iScience.</i> 24:103406. PubMed 3. Ibrahim M, <i>et al.</i> 2016. <i>J Evid Based Complementary Altern Med.</i> 21: 171 - 176. PubMed 4. Montes de Oca R, <i>et al.</i> 2021. <i>Mol Cancer Ther.</i> 20:1941. PubMed 5. Jin Q, <i>et al.</i> 2022. <i>Drug Des Devel Ther.</i> 16:3297. PubMed 6. Wu G, <i>et al.</i> 2020. <i>Br J Pharmacol.</i> 177:5063. PubMed 7. Lyons J, <i>et al.</i> 2018. <i>Sci Signal.</i> 11. PubMed 8. Chen Y, <i>et al.</i> 2022. <i>Front Immunol.</i> 13:835690. PubMed 9. Woodworth JS, <i>et al.</i> 2017. <i>Mucosal Immunol.</i> 0.802083333. PubMed 10. Horkova V, <i>et al.</i> 2020. <i>Cell Reports.</i> 30(5):1504-1514.e7.. PubMed 11. Robertson TF, <i>et al.</i> 2021. <i>J Cell Biol.</i> 220:. PubMed

12. Rosenbaum SR, *et al.* 2020. Cell Rep. 30:510. [PubMed](#)
13. Onai N, *et al.* 2020. Int J Mol Sci. :22. [PubMed](#)
14. Benton K, *et al.* 2009. Regul Pept. 158:68. [PubMed](#)
15. Schubert M, *et al.* 2021. Cancers (Basel). 13: . [PubMed](#)
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RRID AB_313688 (BioLegend Cat. No. 116003)
 AB_313689 (BioLegend Cat. No. 116004)

Antigen Details

Structure	Ig superfamily, 55 kD
Distribution	Majority of thymocytes, T cell subset
Function	TCR co-receptor, T cell activation
Ligand/Receptor	MHC class II molecule
Cell Type	T cells, Thymocytes, Tregs
Biology Area	Immunology
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. Barclay A, <i>et al.</i> 1997. The Leukocyte Antigen FactsBook Academic Press. 2. Bierer BE, <i>et al.</i> 1989. <i>Annu. Rev. Immunol.</i> 7:579. 3. Janeway CA. 1992. <i>Annu. Rev. Immunol.</i> 10:645.
Gene ID	12504

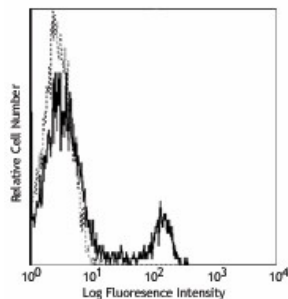
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

FITC anti-mouse CD4, PE anti-mouse CD4, Pacific Blue™ anti-mouse CD4, Biotin anti-mouse CD4, PerCP/Cyanine5.5 anti-mouse CD4, APC anti-mouse CD4, PE/Cyanine7 anti-mouse CD4, Purified anti-mouse CD4, APC/Fire™ 750 anti-mouse CD4, Alexa Fluor® 700 anti-mouse CD4, Brilliant Violet 510™ anti-mouse CD4, Brilliant Violet 421™ anti-mouse CD4, Brilliant Violet 605™ anti-mouse CD4

Product Data



C57BL/6 mouse splenocytes stained with RM4-4 FITC

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