

Purified anti-mouse CD4 (Maxpar® Ready) Antibody

Catalog# / Size	100561 / 100 µg
Clone	RM4-5
Regulatory Status	RUO
Other Names	L3T4, T4
Isotype	Rat IgG2a, 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 co-receptor with the TCR during T cell activation and thymic differentiation by binding MHC class II and associating with the protein tyrosine 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 and EDTA.
Preparation	The antibody was purified by affinity chromatography.
Concentration	1.0 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested CyTOF® - Verified
Recommended Usage	This product is suitable for use with the Maxpar® Metal Labeling Kits . For metal labeling using Maxpar® Ready antibodies, proceed directly to the step to Partially Reduce the Antibody by adding 100 µl of Maxpar® Ready antibody to 100 µl of 4 mM TCEP-R in a 50 kDa filter and continue with the protocol. Always refer to the latest version of Maxpar® User Guide when conjugating Maxpar® Ready antibodies.
Application Notes	The RM4-5 antibody blocks the binding of GK1.5 antibody and H129.19 antibody to CD4 ⁺ T cells, but not RM4-4 antibody. Additional reported applications (for the relevant formats) include: blocking of ligand binding, <i>in vivo</i> depletion of CD4 ⁺ cells ¹ , and immunohistochemistry of acetone-fixed frozen tissue sections ^{2,3,11} and paraffin-embedded sections ¹¹ . Clone RM4-5 is not recommended for immunohistochemistry of formalin-fixed paraffin sections. Instead, acetone frozen or zinc-fixed paraffin sections are recommended. The Ultra-LEAF™ Purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 100575 and 100576).
Additional Product Notes	Maxpar® is a registered trademark of Standard BioTools Inc.
Application References	<ol style="list-style-type: none"> 1. Kruisbeek AM. 1991. <i>In Curr. Protocols Immunol.</i> pp. 4.1.1-4.1.5. (Block, Deplete) 2. Nitta H, <i>et al.</i> 1997. <i>Cell Vision</i> 4:73. (IHC) 3. Fan WY, <i>et al.</i> 2001. <i>Exp. Biol. Med.</i> 226:1045. 4. Muraille E, <i>et al.</i> 2003. <i>Infect. Immun.</i> 71:2704. (IHC) 5. León-Ponte M, <i>et al.</i> 2007. <i>Blood</i> 109:3139. (FC) 6. Bourdeau A, <i>et al.</i> 2007. <i>Blood</i> doi:10.1182/blood-2006-08-044370. (FC) 7. Matsumoto M, <i>et al.</i> 2007. <i>J. Immunol.</i> 178:2499. PubMed 8. Shigeta A, <i>et al.</i> 2008. <i>Blood</i> 112:4915. PubMed 9. Zaborsky N, <i>et al.</i> 2010. <i>J. Immunol.</i> 184:725. PubMed 10. Rodrigues-Manzanet R, <i>et al.</i> 2010. <i>P. Natl Acad Sci USA</i> 107:8706. PubMed 11. Whiteland JL, <i>et al.</i> 1995. <i>J. Histochem. Cytochem.</i> 43:313. (IHC)
(PubMed link indicates BioLegend citation)	

Product Citations

1. McDonald B, *et al.* 2020. Cell Host Microbe. 28(5):660-668.e4. [PubMed](#)
2. Jordan S, *et al.* 2020. Cell. 178(5):1102-1114.e17.. [PubMed](#)
3. An Y *et al.* 2018. Cell reports. 25(3):702-714 . [PubMed](#)

RRID AB_2562762 (BioLegend Cat. No. 100561)

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 Dendritic cells, T cells, Thymocytes, Tregs

Biology Area Immunology

Molecular Family CD Molecules

Antigen References

1. Barclay A, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Bierer BE, *et al.* 1989. *Annu. Rev. Immunol.* 7:579.
3. Janeway CA. 1992. *Annu. Rev. Immunol.* 10:645.

Gene ID [12504](#)

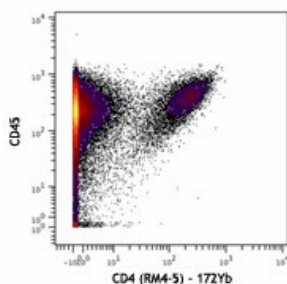
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-mouse CD4, Biotin anti-mouse CD4, FITC anti-mouse CD4, PE anti-mouse CD4, PE/Cyanine5 anti-mouse CD4, Purified anti-mouse CD4, PE/Cyanine7 anti-mouse CD4, APC/Cyanine7 anti-mouse CD4, Alexa Fluor® 647 anti-mouse CD4, Alexa Fluor® 488 anti-mouse CD4, Pacific Blue™ anti-mouse CD4, Alexa Fluor® 700 anti-mouse CD4, PerCP anti-mouse CD4, PerCP/Cyanine5.5 anti-mouse CD4, Brilliant Violet 421™ anti-mouse CD4, APC/Fire™ 750 anti-mouse CD4, Brilliant Violet 570™ anti-mouse CD4, Brilliant Violet 605™ anti-mouse CD4, Brilliant Violet 650™ anti-mouse CD4, Brilliant Violet 711™ anti-mouse CD4, Brilliant Violet 785™ anti-mouse CD4, Brilliant Violet 510™ anti-mouse CD4, Purified anti-mouse CD4 (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse CD4, TotalSeq™-A0001 anti-mouse CD4, TotalSeq™-B0001 anti-mouse CD4, TotalSeq™-C0001 anti-mouse CD4, Ultra-LEAF™ Purified anti-mouse CD4, Spark Violet™ 423 anti-mouse CD4 (L3T4) Antibody

Product Data



C57BL/6 mouse splenocytes stained with 147Sm-anti-CD45 (30-F11) and 172Yb-anti-CD4 (RM4-5). Data provided by DVS Sciences.

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