

## Biotin anti-mouse CD4 Antibody

<b>Catalog# / Size</b>	116010 / 500 µg
<b>Clone</b>	RM4-4
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	L3T4, T4
<b>Isotype</b>	Rat IgG2b, κ
<b>Description</b>	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

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	BALB/c mouse thymocytes
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions.
<b>Concentration</b>	0.5 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . 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.
<b>Application Notes</b>	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 ( <a href="#">Cat. No. 100506</a> ) and GK1.5 ( <a href="#">Cat. No. 100402</a> ) antibodies are recommended.
<b>Application References</b>	<ol style="list-style-type: none"><li>1. Bendelac A. 1995. <i>Curr. Opin. Immunol.</i> 7:367.</li><li>2. Norian LA and Allen PM. 2004. <i>J. Immunol.</i> 173:835.</li></ol>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	<ol style="list-style-type: none"><li>1. Kawakami R, <i>et al.</i> 2021. <i>Immunity.</i> 54(5):947-961.e8. <a href="#">PubMed</a></li><li>2. Hirota K <i>et al.</i> 2018. <i>Immunity.</i> 48(6):1220-1232. <a href="#">PubMed</a></li><li>3. Jaeger N, <i>et al.</i> 2020. <i>Cell Rep.</i> 33:108331. <a href="#">PubMed</a></li></ol>
<b>RRID</b>	AB_2561504 (BioLegend Cat. No. 116010)

### Antigen Details

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<b>Structure</b>	Ig superfamily, 55 kD
<b>Distribution</b>	Majority of thymocytes, T cell subset

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

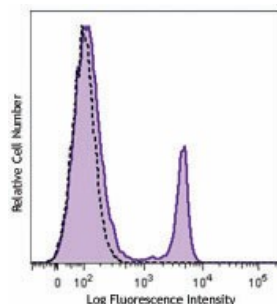
## Related Protocols

[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 were stained with biotinylated CD4 (clone RM4-4) (solid line) or biotinylated rat IgG2b, κ isotype control (dotted line), followed by Sav-FITC.

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