

## Alexa Fluor<sup>®</sup> 700 anti-mouse CD4 Antibody

<b>Catalog# / Size</b>	100536 / 100 µg
<b>Clone</b>	RM4-5
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	L3T4, T4
<b>Isotype</b>	Rat IgG2a, 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 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

<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 Alexa Fluor <sup>®</sup> 700 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, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	<p>Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a>. The suggested use of this reagent is ≤ 0.25 µg per 10<sup>6</sup> cells in 100 µl volume. It is highly recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor<sup>®</sup> 700 has a maximum emission of 719 nm when it is excited at 633nm / 635nm. Prior to using Alexa Fluor<sup>®</sup> 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.</p> <p>Alexa Fluor<sup>®</sup> and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p><a href="#">View full statement regarding label licenses</a></p>
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	The RM4-5 antibody blocks the binding of GK1.5 antibody and H129.19 antibody to CD4 <sup>+</sup> 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 <sup>+</sup> cells <sup>1</sup> , and immunohistochemistry of acetone-fixed frozen tissue sections <sup>2,3,11</sup> and paraffin-embedded sections <sup>11</sup> . 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).
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<b>(PubMed link indicates BioLegend citation)</b>	

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## RRID

AB\_493701 (BioLegend Cat. No. 100536)

## 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>	Dendritic cells, T cells, Thymocytes, Tregs
<b>Biology Area</b>	Immunology
<b>Molecular Family</b>	CD Molecules

## Antigen References

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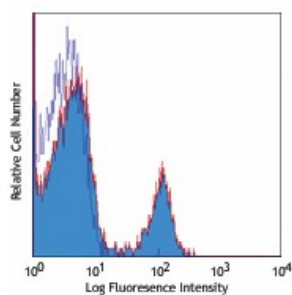
## Related Protocols

[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 CD4 (clone RM4-5) Alexa Fluor® 700 (filled histogram) or rat IgG2a, κ Alexa Fluor® 700 isotype control (open histogram).

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