

RAT anti-MOUSE CD4

Publication Part No. L11503

MAN0006750

Rev. 2.00

Store at 2° to 8°C

Catalog No.	Form	Amount	Excitation	Peak Emission	Matching Isotype Control
MCD0400	Purified	200 µg	—	—	Rat IgG _{2a} Purified (Cat. no. R2a00)
MCD0415-3	Biotin	3.0 mL	—	—	Rat IgG _{2a} Biotin (Cat. no. R2a15)
MCD0426	Alexa Fluor® 405	1.0 mL	402 nm	421 nm	Rat IgG _{2a} Alexa Fluor® 405 (Cat. no. R2a26)
MCD0428	Pacific Blue™	1.0 mL	405 nm	455 nm	Rat IgG _{2a} Pacific Blue (Cat. no. R2a28)
MCD0404	R-PE	0.5 mL	496 nm	478 nm	Rat IgG _{2a} R-PE (Cat. no. R2a04)
MCD0404-3		3.0 mL			
MCD0420	Alexa Fluor® 488	1.0 mL	488 nm	519 nm	Rat IgG _{2a} Alexa Fluor® 488 (Cat. no. R2a20)
MCD0401	FITC	1.0 mL	488 nm	519 nm	Rat IgG _{2a} FITC (Cat. no. R2a01)
MCD0401-3		3.0 mL			
MCD0401-5		5.0 mL			
MCD0430	Pacific Orange™	3.0 mL	405 nm	551 nm	Rat IgG _{2a} Pacific Orange™ (Cat. no. R2a30)
MCD0417	PE-TR†	0.5 mL	488 nm	615 nm	Rat IgG _{2a} PE-TR (Cat. no. R2a17)
MCD0422	PE-Alexa Fluor® 610	1.0 mL	488 nm	628 nm	Rat IgG _{2a} PE-Alexa Fluor® 610 (Cat. no. R2a22)
MCD0405	APC	0.5 mL	650 nm	660 nm	Rat IgG _{2a} APC (Cat. no. R2a05)
MCD0421	Alexa Fluor® 647	1.0 mL	650 nm	668 nm	Rat IgG _{2a} Alexa Fluor® 647 (Cat. no. R2a21)
MCD0406	TC‡	0.5 mL	488 nm	670 nm	Rat IgG _{2a} TC (Cat. no. R2a06)
MCD0418	PE-Cy®5.5	0.5 mL	488 nm	694 nm	Rat IgG _{2a} PE-Cy5.5 (Cat. no. R2a18)
MCD0419	APC-Cy®5.5	0.5 mL	600–650 nm	694 nm	Rat IgG _{2a} APC-Cy5.5 (Cat. no. R2a19)
A14785	PerCP-Cy®5.5	0.125 mL (25 µg)	482 nm	695 nm	—
MCD0424	PE-Alexa Fluor® 700	1.0 mL	488 nm	723 nm	Rat IgG _{2a} PE-Alexa Fluor® 700 (Cat. no. R2a24)
MCD0429	Alexa Fluor® 700	1.0 mL	702 nm	723 nm	Rat IgG _{2a} Alexa Fluor® 700 (Cat. no. R2a29)
MCD0412	PE-Cy® 7	0.5 mL	488 nm	767 nm	Rat IgG _{2a} PE-Cy7 (Cat. no. R2a12)
MCD0427	APC-Alexa Fluor® 750	1.0 mL	650 nm	775 nm	Rat IgG _{2a} APC-Alexa Fluor® 750 (Cat. no. R2a27)

† TR, Texas Red®

‡ TC, TRI-COLOR®, PE-Cy®5.

Product Description

The Rat anti-Mouse CD4 Monoclonal Antibody (mAb) reacts with the CD4 antigen expressed on the majority of thymocytes and on the MHC class II restricted subset of mature T cells, including Th cells^{1,2}. Mouse CD4 antigen has also been reported to be present on multipotential hematopoietic stem cells, bone marrow myeloid precursors, and intrathymic precursors^{2,3}. As a co-receptor in the TCR complex, CD4 is involved in T-cell activation through interaction with MHC class II on antigen presenting cells and in signal transduction via protein tyrosine kinase lck¹.

Product Specifications

Clonality:	Monoclonal
Host/Class:	Rat IgG
Reactivity:	Mouse CD4
Sequence Identity:	Mouse
Clone/PAD:	RM4-5
Isotype:	IgG _{2a}
Lot:	See product label

For research use only. Not for human or animal therapeutic or diagnostic use.

Manufacturing Site • 7335 Executive Way • Frederick • MD 21704 • E-mail: techsupport@lifetech.com

Product Applications

Applications reported for the Rat anti-Mouse CD4 mAb include flow cytometry, and immunohistochemistry (acetone-fixed, frozen sections).

Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

Storage and Handling

Store reagents at 2° to 8°C. If the reagent is being diluted, it is recommended that only the quantity to be used within one week be diluted. Cells should be analyzed within 18 hours of staining for best results.

Avoid light exposure with fluorochrome-conjugated antibodies. Use dim light during handling, incubation with cells, and prior to analysis.

Storage Buffer

Phosphate Buffered Saline (PBS) with 0.1% sodium azide. Conjugated products are also formulated with BSA and may contain sucrose as an additional stabilizing agent. PerCP-Cy[®]5.5 conjugates contain an aqueous buffer with 0.09% sodium azide, and may contain carrier protein/stabilizer.

Caution: Sodium azide is an extremely toxic and dangerous compound particularly when combined with acids or metals. Properly dispose of solutions containing sodium azide.

References

1. Bierer, B. E., B. P. Sleckman, S. E. Ratnofsky, and S. J. Burakoff. 1989. The biologic roles of CD2, CD4, and CD8 in T-cell activation. *Ann. Rev. Immunol.* 7: 579.
2. Fredrickson, G. G., and R. S. Basch. 1989. L3T4 antigen expression by hemopoietic precursor cells. *J. Exp. Med.* 169: 1473.
3. Wu, L., R. Scollay, M. Egerton, M. Pearse, G. J. Spangrude, and K. Shortman. 1991. CD4 expressed on earliest T-lineage precursor cells in the adult murine thymus. *Nature* 349: 71.














Product Documentation

To obtain a Certificate of Analysis or Safety Data Sheets (SDSs), visit www.lifetechnologies.com/support.

Related Products

Product Name	Quantity	Catalog no.
AbC™ Anti-Mouse Bead Kit	1 kit	A10344
AbC™ anti-Rat/Hamster Bead Kit	1 kit	A10389
Protein A Agarose	5 mL	15918-014
Recombinant Protein G (rProtein G) Agarose	5 mL	15920-010

Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		In vitro diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

Limited Product Warranty

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