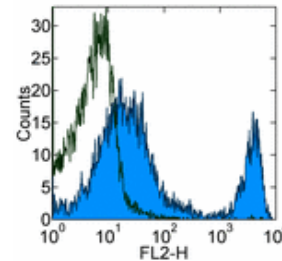


## Product Information

Contents: Biotin anti-mouse CD4 (L3T4)  
Catalog Number: 13-0042  
Sizes: 50 ug, 100 ug, 500 ug, 1 mg  
Formulation: Phosphate buffer pH 7.2,  
150 mM NaCl, 0.09% NaN<sub>3</sub>  
Storage Conditions: Store at 4°C.  
DO NOT FREEZE.  
Clone: RM4-5  
Isotype: Rat IgG2a, κ



*Staining of C57Bl/6 splenocytes with 0.125 µg of Biotin Rat IgG2a Iso Cntrl (cat. 13-4321) (open histogram) or 0.125 µg of Biotin anti-mouse CD4 (RM4-5) (colored histogram) followed by SAV-PE (cat. 12-4312). Total viable cells were used for analysis.*

Available Formats of This Product				
Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
10-0042	APC-Cy7 anti-mouse CD4	633	760	FC
11-0042	FITC anti-mouse CD4 (L3T4)	488	518	FC
12-0042	PE anti-mouse CD4 (L3T4)	488	575	FC
13-0042	Biotin anti-mouse CD4 (L3T4)	N/A	N/A	FC
14-0042	Affinity Purified anti-mouse CD4 (L3T4)	N/A	N/A	FA FC IHC
15-0042	PE-Cy5 anti-mouse CD4 (L3T4)	488	670	FC
16-0042	Functional Grade* Purified anti-mouse CD4 (L3T4)	N/A	N/A	FC
17-0042	APC anti-mouse CD4 (L3T4)	633	660	FC
25-0042	PE-Cy7 anti-mouse CD4 (L3T4)	488	760	FC
30-0042	Allophycocyanin-Cy5.5 (APC-Cy5.5) anti-mouse CD4 (L3T4)	633	690	FC
35-0042	PE-Cy5.5 anti-mouse CD4	488	690	FC

\*Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/µg.  
Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

## Description

The RM4-5 monoclonal antibody reacts with the mouse CD4 molecule, a 55 kDa cell surface receptor expressed by a majority of thymocytes, subpopulation of mature T cells and dendritic cells. CD4 binds to MHC class II on the surface of antigen presenting cells and plays an important role both in T cell development and in optimal functioning of mature T cells. In T cells, CD4 associates with protein tyrosine kinase p56lck through its cytoplasmic tail. Binding of RM4-5 is blocked by GK1.5.

## Usage

For research use only, not for diagnostic or therapeutic use. The RM4-5 antibody has been reported for use in flow cytometric analysis.

## Applications Tested

The RM4-5 antibody has been tested by flow cytometric analysis of mouse thymocyte and splenocyte suspensions. This can be used at less than or equal to 0.25 µg per million cells in a 100 µl total staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

## Related Products

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Cat. 11-0041 FITC anti-mouse CD4 (L3T4) (clone GK1.5)  
Cat. 12-0041 PE anti-mouse CD4 (L3T4) (clone GK1.5)  
Cat. 13-0041 Biotin anti-mouse CD4 (L3T4) (clone GK1.5)  
Cat. 14-0041 Affinity Purified anti-mouse CD4 (L3T4) (clone GK1.5)  
Cat. 15-0041 PE-Cy5 anti-mouse CD4 (L3T4) (clone GK1.5)  
Cat. 16-0041 Functional Grade Purified anti-mouse CD4 (L3T4) (clone GK1.5)  
Cat. 17-0041 APC anti-mouse CD4 (L3T4) (clone GK1.5)  
Cat. 19-0041 Cy5 anti-mouse CD4 (L3T4) (clone GK1.5)  
Cat. 25-0041 PE-Cy7 anti-mouse CD4 (L3T4) (clone GK1.5)  
Cat. 10-0042 APC-Cy7 anti-mouse CD4 (clone RM4-5)  
Cat. 11-0042 FITC anti-mouse CD4 (L3T4) (clone RM4-5)  
Cat. 12-0042 PE anti-mouse CD4 (L3T4) (clone RM4-5)  
Cat. 14-0042 Affinity Purified anti-mouse CD4 (L3T4) (clone RM4-5)  
Cat. 15-0042 PE-Cy5 anti-mouse CD4 (L3T4) (clone RM4-5)  
Cat. 16-0042 Functional Grade Purified anti-mouse CD4 (L3T4) (clone RM4-5)  
Cat. 17-0042 APC anti-mouse CD4 (L3T4) (clone RM4-5)  
Cat. 25-0042 PE-Cy7 anti-mouse CD4 (L3T4) (clone RM4-5)  
Cat. 35-0042 PE-Cy5.5 anti-mouse CD4 (clone RM4-5)  
Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)  
Cat. 12-4317 Streptavidin-PE (Phycoerythrin)  
Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)  
Cat. 13-4321 Biotin Rat IgG2a Isotype Control

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## References

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Okumura, K. 2000. Personal communication.

Wilde, D. B., P. Marrack, et al. 1983. Evidence implicating L3T4 in class II MHC antigen reactivity; monoclonal antibody GK1.5 (anti-L3T4a) blocks class II MHC antigen- specific proliferation, release of lymphokines, and binding by cloned murine helper T lymphocyte lines. *J Immunol* 131(5): 2178-83.