

Product Information

Contents: Fluorescein isothiocyanate (FITC) anti-mouse CD4 (L3T4)

Catalog Number: 11-0042

Sizes: 50 ug, 100 ug, 500 ug, 1 mg

Formulation: Phosphate buffer pH 7.2, 150 mM NaCl, 0.09% NaN₃

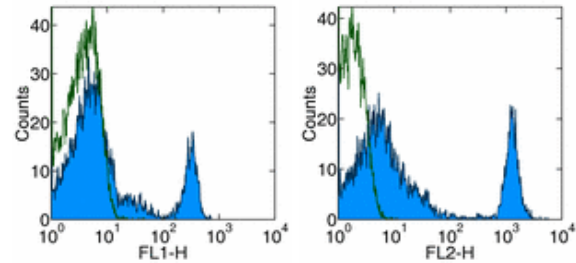
Storage Conditions: Store at 4°C.

DO NOT FREEZE.

LIGHT-SENSITIVE MATERIAL.

Clone: RM4-5

Isotype: Rat IgG2a, κ



Surface staining of mouse splenocytes with anti-mouse CD4 (RM4-5) FITC (left), and PE (right). Appropriate isotype controls were used (open histogram). 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

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. 12-0042 PE anti-mouse CD4 (L3T4) (clone RM4-5)
Cat. 13-0042 Biotin 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. 11-4321 FITC Rat IgG2a Isotype Control

References

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.