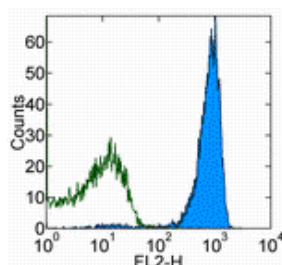


## Anti-Mouse CD4 Functional Grade Purified

**Catalog Number:** 16-0043

**Also Known As:** L3T4, Ly-4

**RUO: For Research Use Only. Not for use in diagnostic procedures.**



Staining of C57Bl/6 thymocytes with 0.25 ug of Rat IgG2b K Isotype Control Purified (cat. 14-4031) (open histogram) or 0.25 ug of Anti-Mouse CD4 Purified (filled histogram) followed by Anti-Rat IgG Biotin (cat. 13-4813) and Streptavidin PE (cat. 12-4317). Cells in the lymphocyte gate were used for analysis.

### Product Information

**Contents:** Anti-Mouse CD4 Functional Grade Purified

**REF** **Catalog Number:** 16-0043

**Clone:** RM4-4

**Concentration:** 1 mg/mL

**Host/Isotype:** Rat IgG2b, kappa


**Handling Conditions:** Use in sterile environment.

**Endotoxin Level:** Less than 0.001 ng/ug antibody, as determined by the LAL assay.

**Formulation:** aqueous buffer, no sodium azide

 **Temperature Limitation:** Store at 2-8°C.

**LOT** **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

### Description

The RM4-4 monoclonal antibody reacts with the mouse CD4 molecule, a 55 kDa cell surface receptor expressed by the majority of thymocytes, a 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 the protein tyrosine kinase lck through its cytoplasmic tail. Binding of RM4-4 does not block binding of the CD4 monoclonal antibodies RM4-5 or GK1.5.

### Applications Reported

This RM4-4 antibody has been reported for use in flow cytometric analysis.

### Applications Tested

This RM4-4 antibody has been tested by flow cytometric analysis of mouse splenocytes and thymocytes. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

Godfrey, D.I., J. Kennedy, P. Mombaerts, S. Tonegawa, and A. Zlotnik. Onset of TCR-gene rearrangement and role of TCR-expression during CD3-CD4-CD8- thymocyte differentiation. J. Immunol 1994. 152: 4783 - 4792.

Wu, L., R. Scollay, M. Egerton, M. Pearse, G.J. Spangrude, and K. Shortman. CD4 expressed on earliest T-lineage precursor cells in the adult murine thymus. Nature 1991. 349: 71 - 74.

Wu, L., M. Antica, G.R. Johnson, R. Scollay, and K. Shortman. Developmental potential of the earliest precursor cells from the adult mouse thymus. J. Exp. Med. 1991. 174: 1617 - 1627.

Fredrickson, G.G., and R.S. Basch. L3T4 antigen expression by hemopoietic precursor cells. J. Exp. Med. 1989. 169: 1473 - 1478.

### Related Products

16-0041 Anti-Mouse CD4 Functional Grade Purified (GK1.5)

16-4031 Rat IgG2b K Isotype Control Functional Grade Purified

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