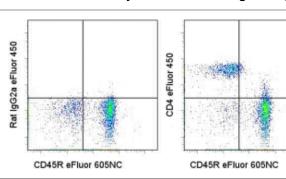


# Anti-Mouse CD4 eFluor® 450

Catalog Number: 48-0042 Also Known As:L3T4, Ly-4

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



Staining of BALB/c splenocytes with Anti-Human/Mouse CD45R (B220) FITC (cat. 11-0452) eFluor® 605NC and 0.06 ug of Rat IgG2a kappa Isotype Control eFluor® 450 (cat. 48-4321) (left) or 0.06 ug of Anti-Mouse CD4 eFluor® 450 (right). Cells in the lymphocyte gate were used for analysis.

### **Product Information**

Contents: Anti-Mouse CD4 eFluor® 450

**REF Catalog Number:** 48-0042

Clone: RM4-5

Concentration: 0.2 mg/ml Host/Isotype: Rat IgG2a, kappa Formulation: aqueous buffer, 0.09% sodium azide, may

contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C. Do not freeze.

▲ Light sensitive material.
 LoT Batch Code: Refer to Vial
 ☑ Use By: Refer to Vial

Coution contains Azi



Caution, contains Azide

# 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.

## **Applications Reported**

This RM4-5 antibody has been reported for use in flow cytometric analysis.

eFluor® 450 is a replacement for Pacific Blue®. eFluor® 450 emits at 456 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochome.

# **Applications Tested**

This RM4-5 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.125  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. 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.

eFluor® 450 is a replacement for Pacific Blue®. eFluor® 450 emits at 456 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochome.

# References

Bliss SK, Bliss SP, Beiting DP, Alcaraz A, Appleton JA. IL-10 regulates movement of intestinally derived CD4+ T cells to the liver. J Immunol. 2007 Jun 15;178(12):7974-83. (RM4-5, FC, PubMed)

Rubinstein MP, Kovar M, Purton JF, Cho JH, Boyman O, Surh CD, Sprent J. Converting IL-15 to a superagonist by binding to soluble IL-15R alpha. Proc Natl Acad Sci U S A. 2006 Jun 13;103(24):9166-71. (RM4-5), FC, PubMed)

Irie J, Wu Y, Wicker LS, Rainbow D, Nalesnik MA, Hirsch R, Peterson LB, Leung PS, Cheng C, Mackay IR, Gershwin ME, Ridgway WM. NOD.c3c4 congenic mice develop autoimmune biliary disease that serologically and pathogenetically models human primary biliary cirrhosis. J Exp Med. 2006 May 15;203(5):1209-19. (RM4-5, IHC frozen, PubMed)

Andres PG, Beck PL, Mizoguchi E, Mizoguchi A, Bhan AK, Dawson T, Kuziel WA, Maeda N, MacDermott RP, Podolsky DK, Reinecker HC. Mice with a selective deletion of the CC chemokine receptors 5 or 2 are protected from dextran sodium sulfate-mediated colitis: lack of CC chemokine receptor 5 expression results in a NK1.1+ lymphocyte-associated Th2-type immune response in the intestine. J Immunol. 2000 Jun 15;164(12):6303-12. (**RM4-5**, IHC frozen)

Shi Y, Kaliyaperumal A, Lu L, Southwood S, Sette A, Michaels MA, Datta SK. Promiscuous presentation and recognition of nucleosomal autoepitopes in lupus: role of autoimmune T cell receptor alpha chain. J Exp Med. 1998 Feb 2;187(3):367-78. (**RM4-5**, FA)

Wilde DB, Marrack P, Kappler J, Dialynas DP, Fitch FW. 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. 1983 Nov;131(5):2178-83.

### **Related Products**

11-0452 Anti-Human/Mouse CD45R (B220) FITC (RA3-6B2) 48-4321 Rat IgG2a K Isotype Control eFluor® 450 (eBR2a)

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