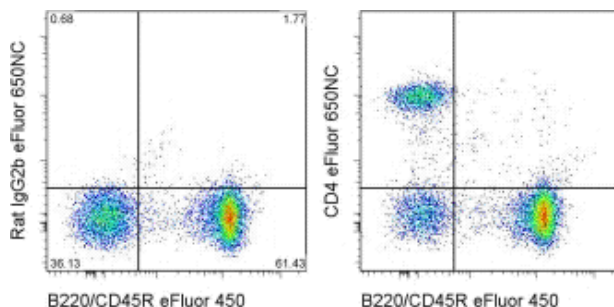


Anti-Mouse CD4 eFluor® 650NC

Catalog Number: 95-0041

Also Known As: L3T4, Ly-4

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



Staining of C57BL/6 splenocytes with Anti-Human/mouse CD45R (B220) eFluor® 450 (cat. 48-0452) and Rat IgG2b K Isotype Control eFluor® 650NC (cat. 95-4031) (left) or Anti-Mouse CD4 eFluor® 650NC (right). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse CD4 eFluor® 650NC

REF **Catalog Number:** 95-0041

Clone: GK1.5

Concentration: 5 uL

Host/Isotype: Rat IgG2b, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C. Light sensitive material. This product is guaranteed for 6 months upon receipt when stored properly.

LOT **Batch Code:** Refer to Vial

Use By: Refer to Vial

Caution, contains Azide

Description

The GK1.5 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 GK1.5 is blocked by RM4-5.

Applications Reported

This GK1.5 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This GK1.5 antibody has been pre-titrated and tested by flow cytometric analysis of mouse splenocytes. This can be used at 5 µL per test. A test is defined as the amount 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 10⁵ to 10⁸ cells/test.

The Isotype Control Rat IgG2b eFluor® 650NC (cat. 95-4031) should be used at 5 uL/test.

Laser/Filter Recommendation: When using eFluor 650NC, we recommend excitation with the 405nm violet laser with an appropriate filter set, such as the 630 LP dichroic mirror with the 660/40 bandpass filter. The eFluor 650NC can be minimally excited off of the 633 nm laser, and because its peak emission is 650nm, it will require some compensation out of the APC detector.

Fixation Recommendation: When fixing samples that have been stained with nanocrystal reagents, we recommend keeping the total volume at approximately 200 uL. (100 uL cells + 100 uL IC Fixation Buffer (cat. 00-8222)) and the exposure time at 30-60 minutes to preserve the optimal fluorescent signal from the nanocrystal reagent.

For answers about fixation and other questions, please refer to Nanocrystal Frequently Asked Questions or contact eBioscience Technical Support.

References

Mochimaru H, Usui T, Yaguchi T, Nagahama Y, Hasegawa G, Usui Y, Shimmura S, Tsubota K, Amano S, Kawakami Y, Ishida S. Suppression of alkali burn-induced corneal neovascularization by dendritic cell vaccination targeting VEGF receptor 2. Invest Ophthalmol Vis Sci. 2008 May;49(5):2172-7. (**GK1.5**, in vivo depletion, PubMed)

Yang Z, Day YJ, Toufektsian MC, Xu Y, Ramos SI, Marshall MA, French BA, Linden J. Myocardial infarct-sparing effect of adenosine A2A receptor activation is due to its action on CD4+ T lymphocytes. Circulation. 2006 Nov 7;114(19):2056-64. (**GK1.5**, in vivo depletion, PubMed)

Dialynas DP, Quan ZS, Wall KA, Pierres A, Quintáns J, Loken MR, Pierres M, Fitch FW. Characterization of the murine T cell surface molecule, designated L3T4, identified by monoclonal antibody GK1.5: similarity of L3T4 to the human Leu-3/T4 molecule. J Immunol. 1983 Nov;131(5):2445-51.

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

00-4222 Flow Cytometry Staining Buffer

48-0032 Anti-Mouse CD3 eFluor® 450 (17A2)

48-0452 Anti-Human/Mouse CD45R (B220) eFluor® 450 (RA3-6B2)

93-0081 Anti-Mouse CD8a eFluor® 605NC (53-6.7)

95-4031 Rat IgG2b K Isotype Control eFluor® 650NC

Legal

Under patent number: US 7,939,170 and additional pending patent application(s)

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