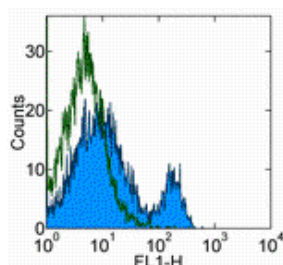


Anti-Mouse CD4 Purified

Catalog Number: 14-0041

Also Known As: L3T4, Ly-4

RUO: For Research Use Only



Staining of C57Bl/6 splenocytes with 0.06 ug of Rat IgG2b Isotype Control Purified (cat. 14-4031) (open histogram) or 0.06 ug of Anti-Mouse CD4 Purified (filled histogram) followed by Anti-Rat IgG FITC (cat. 11-4811). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse CD4 Purified

REF **Catalog Number:** 14-0041

Clone: GK1.5

Concentration: 0.5 mg/mL

Host/Isotype: Rat IgG2b, kappa

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



Temperature Limitation: Store at 2-8°C.



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

The GK1.5 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistochemical staining of frozen tissue sections. It has also been reported in isolation and depletion of CD4⁺ cells, blocking of ligand binding and T cell activation via CD4. (Please use Functional Grade purified GK1.5, cat. 16-0041, in functional assays.)

Applications Tested

The GK1.5 antibody has been tested by flow cytometric analysis of mouse thymocyte and splenocyte suspensions. This can be used at less than or equal to 0.125 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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

11-4811 Anti-Rat IgG FITC

13-4813 Anti-Rat IgG Biotin (Polyclonal)

14-4031 Rat IgG2b K Isotype Control Purified

17-4317 Streptavidin APC

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

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