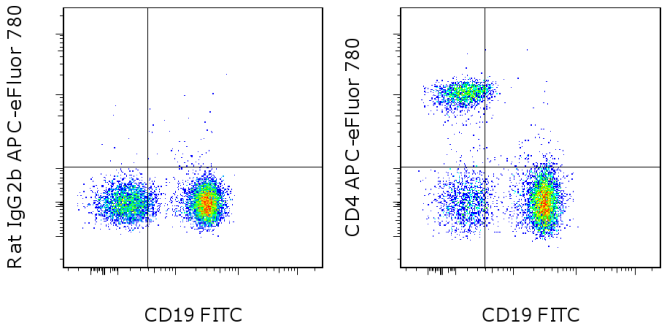
Anti-Mouse CD4 APC-eFluor® 780

Catalog Number: 47-0041
Also known as: L3T4, Ly-4
RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of C57Bl/6 splenocytes with Anti-Mouse CD19 FITC (cat. 11-0193) and 0.06 ug of Rat IgG2b K Isotype Control APC-eFluor® 780 (cat. 47-4031) (left) or 0.06 ug of Anti-Mouse CD4 APC-eFluor® 780 (right). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Mouse CD4 APC-eFluor® 780
REF **Catalog Number:** 47-0041
Clone: GK1.5
Concentration: 0.2 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. Do not freeze. Light-sensitive material. This tandem dye is sensitive to photo-induced oxidation. Protect this vial from light during storage, handling & experimental procedures.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial
Contains sodium 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 tested by flow cytometric analysis of mouse splenocytes. 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

APC-eFluor® emits at 780 nm and is excited with the Red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochome.

Light sensitivity: Tandem is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 uL cell sample + 100 uL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance

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after fixation can be made, but clone specific performance should be determined empirically.

References

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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

11-0193 Anti-Mouse CD19 FITC (eBio1D3 (1D3))
47-4031 Rat IgG2b K Isotype Control APC-eFluor® 780

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