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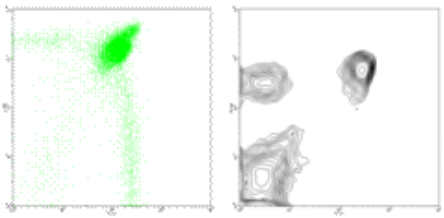
Product Information

Contents: Fluorescein isothiocyanate (FITC) anti-mouse CD4 (L3T4)
Catalog Number: 11-0041
Sizes: 50 ug, 100 ug, 500 ug, 1 mg
Formulation: Phosphate buffer pH 7.2, 150 mM NaCl, 0.09% NaN_3
Storage Conditions: Store at 4°C.
DO NOT FREEZE.
LIGHT-SENSITIVE MATERIAL.
Clone: GK1.5
Isotype: Rat IgG2b, κ



Staining of mouse thymocytes with PE anti-CD8a (cat.12-0081) (left) or splenocytes with PE anti-CD3e (cat.12-0031) (right) and FITC anti-mouse CD4 (GK1.5). Total viable cells were used for analysis.

Available Formats of This Product

Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
11-0041	FITC anti-mouse CD4 (L3T4)	488	518	FC
12-0041	PE anti-mouse CD4 (L3T4)	488	575	FC
13-0041	Biotin anti-mouse CD4 (L3T4)	N/A	N/A	FC
14-0041	Affinity Purified anti-mouse CD4 (L3T4)	N/A	N/A	FC IH/F IP
15-0041	PE-Cy5 anti-mouse CD4 (L3T4)	488	670	FC
16-0041	Functional Grade* Purified anti-mouse CD4 (L3T4)	N/A	N/A	FC
17-0041	APC anti-mouse CD4 (L3T4)	633	660	FC
19-0041	Cy5 anti-mouse CD4 (L3T4)	633	670	FC
25-0041	PE-Cy7 anti-mouse CD4 (L3T4)	488	760	FC

*Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/µg.
Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

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.

Usage

For research use only, not for diagnostic or therapeutic use. The GK1.5 antibody has been reported for use in flow cytometric analysis.

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 0.25 µg per million cells in a 100 µl total staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Related Products

Cat. 12-0041 PE anti-mouse CD4 (L3T4) (clone GK1.5)
Cat. 13-0041 Biotin anti-mouse CD4 (L3T4) (clone GK1.5)

Cat. 14-0041 Affinity Purified anti-mouse CD4 (L3T4) (clone GK1.5)
Cat. 15-0041 PE-Cy5 anti-mouse CD4 (L3T4) (clone GK1.5)
Cat. 16-0041 Functional Grade Purified anti-mouse CD4 (L3T4) (clone GK1.5)
Cat. 17-0041 APC anti-mouse CD4 (L3T4) (clone GK1.5)
Cat. 19-0041 Cy5 anti-mouse CD4 (L3T4) (clone GK1.5)
Cat. 25-0041 PE-Cy7 anti-mouse CD4 (L3T4) (clone GK1.5)
Cat. 10-0042 APC-Cy7 anti-mouse CD4 (clone RM4-5)
Cat. 11-0042 FITC anti-mouse CD4 (L3T4) (clone RM4-5)
Cat. 12-0042 PE anti-mouse CD4 (L3T4) (clone RM4-5)
Cat. 13-0042 Biotin anti-mouse CD4 (L3T4) (clone RM4-5)
Cat. 14-0042 Affinity Purified anti-mouse CD4 (L3T4) (clone RM4-5)
Cat. 15-0042 PE-Cy5 anti-mouse CD4 (L3T4) (clone RM4-5)
Cat. 16-0042 Functional Grade Purified anti-mouse CD4 (L3T4) (clone RM4-5)
Cat. 17-0042 APC anti-mouse CD4 (L3T4) (clone RM4-5)
Cat. 25-0042 PE-Cy7 anti-mouse CD4 (L3T4) (clone RM4-5)
Cat. 35-0042 PE-Cy5.5 anti-mouse CD4 (clone RM4-5)
Cat. 11-4031 Fluorescein isothiocyanate (FITC) Rat IgG2b Isotype Control (clone eB149/10H5)

References

Dialynas, D. P., Z. S. Quan, et al. (1983). "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 131(5): 2445-51.
Wilde, D. B., P. Marrack, et al. (1983). "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 131(5): 2178-83.