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Technical Data Sheet

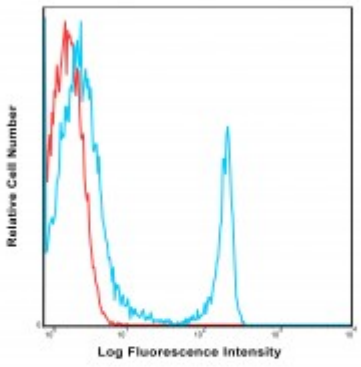
Anti-Mouse CD4 FITC

Catalogue Number : 06112-50

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

Product Information

Clone: GK1.5
Format/Conjugate: FITC
Concentration: 0.5 mg/mL
Reactivity: Mouse
Laser: Blue (488nm)
Peak Emission: 520nm
Peak Excitation: 494nm
Filter: 530/30
Brightness (1=dim,5=brightest): 3
Isotype: Rat IgG2b, kappa
Formulation: Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, ph7.2.
Storage: Product should be kept at 2-8°C and protected from prolonged exposure to light.
Applications: FC



C57Bl/6 splenocytes were stained with FITC GK1.5 with relevant isotype control in Red.

Description

The GK1.5 monoclonal antibody specifically binds with the mouse CD4 molecule, also known as L3T4, a 55 kDa differentiation antigen which binds to the MHC class II. CD4 is expressed on most thymocytes, a subpopulation of mature T lymphocytes, dendritic cells, pluripotent hematopoietic stem cells, B cell precursors, and lymphoid precursors inside the thymus. It is also expressed on the mouse egg cell membrane, enhancing adhesion to MHC class II bearing sperm. By interaction with MHC class II on the surface of APC, CD4 initiates the development of T lymphocytes and helps the optimum functioning of mature T lymphocytes.
The binding of the GK1.5 antibody blocks the binding of the Anti-Mouse CD4 RM4-5 antibody.

Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤0.25 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1.Dialynas, D. P., Quan, Z. S., Wall, K. A., Pierres, A., Quintans, J., Loken, M. R., ... Fitch, F. W. (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.;The Journal of Immunology,;131(5), 2445-2451.

2. Bosselut, R., Zhang, W., Ashe, J. M., Kopacz, J. L., Samelson, L. E., Singer, A. (1999). Association of the adaptor molecule LAT with CD4 and CD8 coreceptors identifies a new coreceptor function in T cell receptor signal transduction.;The Journal of experimental medicine,;190(10), 1517-1526.

3. Ghobrial, R. R., Boublik, M., Winn, H. J., Auchincloss Jr, H. (1989). < i> In Vivo</i> use of monoclonal antibodies against murine T cell antigens.;Clinical immunology and immunopathology,;52(3), 486-506.

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