

Anti-Mouse CD4 SAFIRE Purified

Catalog Number :06112-25

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

Product Information

Clone: GK1.5

Format/Conjugate: SAFIRE Purified

Concentration: 2 mg/mL

Reactivity: Mouse

Laser: Not Applicable

Peak Emission: Not Applicable

Peak Excitation: Not Applicable

Filter: Not Applicable

Brightness (1=dim,5=brightest): Not Applicable

Isotype: Rat IgG2b, kappa

Formulation: Phosphate-buffered aqueous solution, pH7.2.

Storage: Product should be kept at 2-8°C and protected from prolonged exposure to light.

Applications: FC, FA, IHC, IP

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. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography. The endotoxin level is determined by LAL test to be less than 0.01 EU/μg of the protein.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. 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). *In Vivo* use of monoclonal antibodies against murine T cell antigens. *Clinical immunology and immunopathology*, 52(3), 486-506.