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Technical Data Sheet

Anti-Mouse CD4 BG Violet 450

Catalog Number :06122-40

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

Product Information

Clone: RM4-5

Format/Conjugate: BG Violet 450

Concentration: 0.2 mg/mL

Reactivity: Mouse

Laser: Violet (405nm)

Peak Emission: 450nm

Peak Excitation: 404nm

Filter: 450/50

Brightness (1=dim,5=brightest): 2

Isotype: Rat IgG2a, 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

Description

The RM4-5 monoclonal antibody specifically reacts with mouse CD4, also known as L3T4, a 55 kDa differentiation antigen expressed by the majority of thymocytes, subpopulations of mature T cells (like major histocompatibility complex class II-restricted T lymphocytes), a subset of natural killer T cells, and on pluripotent hematopoietic stem cells. CD4 binds to the major histocompatibility complex class II (MHC class II) and enhances T lymphocyte development and mature T cells functions. In T lymphocytes, CD4 binds to the cytoplasmic tail of enzyme tyrosine kinase (p56lck).

Binding of RM4-5 is blocked by the anti-mouse CD4 clone GK1.5.

BG Violet 450 conjugate is an alternative to the Pacific Blue, eFluor 450, or BD Horizon V450 dyes. It is excited by the violet (405 nm) laser, with a peak emission of 450nm.

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 ≤0.125 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1.Shevach, E. M. (2000). Regulatory T cells in autoimmmunity*.;Annual review of immunology,;18(1), 423-449.

2. Wu, L., Scollay, R., Egerton, M., Pearse, M., Spangrude, G. J., Shortman, K. (1991). CD4 expressed on earliest T-lineage precursor cells in the adult murine thymus.

3. Bliss, S. K., Bliss, S. P., Beiting, D. P., Alcaraz, A., Appleton, J. A. (2007). IL-10 regulates movement of intestinally derived CD4+ T cells to the liver.;The Journal of Immunology,;178(12), 7974-7983.