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Technical Data Sheet

Anti-Mouse CD90.2 BG Violet 450

Catalog Number :03012-40

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

Product Information

Clone: 30-H12

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 IgG2b

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 30-H12 monoclonal antibody specifically binds to MouseCD90.2, an alloantigen known as Thy-1.2, expressed on thymocytes, mature T cells, epithelial cells, neurons, hematopoietic stem cells, and fibroblasts. CD90 is a membrane glycoprotein that regulates the adhesion and signal transduction in T lymphocytes, and the adhesion of thymocytes to thymic stroma.

The interaction between 30-H12 and the antibody to the CD3/TCR complex upregulates thymocytes signal transduction and apoptosis and downregulates mature T cell proliferation. The 30-H12 antibody seems to be unable to cross-link with CD90.1.

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 ≤0.25 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1.Ledbetter, J. A., Herzenberg, L. A. (1979). Xenogeneic Monoclonal Antibodies to Mouse Lymphoid Differentiation Antigens*.;Immunological reviews,;47(1), 63-90.

2. Radrizzani, M., Carminatti, H., Pivetta, O. H., Vargas, V. P. (1995). Developmental regulation of Thy 1.2 rate of synthesis in the mouse cerebellum.Journal of neuroscience research,;42(2), 220-227.

3. Seaman, W. E., Wofsy, D., Greenspan, J. S., Ledbetter, J. A. (1983). Treatment of autoimmune MRL/Ipr mice with monoclonal antibody to Thy-1.2: a single injection has sustained effects on lymphoproliferation and renal disease.The Journal of Immunology,;130(4), 1713-1718.