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Technical Data Sheet

Anti-Mouse CD45 BG Violet 450

Catalogue Number : 07512-40

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

Product Information

Clone: 30-F11
Format/Conjugate: BG Violet 450
Concentration: 0.2 mg/mL
Reactivity: Mouse
Laser: Violet (405nm)
Peak Emission: nm
Peak Excitation: nm
Filter:
Brightness (1=dim,5=brightest):
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

Description

The 30-F11 monoclonal antibody specifically reacts with all isoforms of CD45 and also with the alloantigens CD45.1 and CD45.2 (LCA). CD45 is a transmembrane glycoprotein, expressed by all the hematopoietic cells, except for platelets and mature erythrocytes, which distinguishes the leukocytes from the non-hematopoietic cells. The CD45 molecule is a member of the Protein Tyrosine Phosphatase (PTP) family, because its intracellular region contains two PTP domains. The extracellular region's variability is caused by different levels of glycosylation, and the splicing of the 4, 5, and 6 exons.

The isoforms found in the mouse strains depend on the activation state, maturation stage and cell type, and are very important in B and T lymphocytes antigen receptor signal transduction.

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 ≤0.5 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. Thomas, M. L. (1989). The leukocyte common antigen family.;Annual review of immunology,;7(1), 339-369.

3. Simon, D. I., Chen, Z., Seifert, P., Edelman, E. R., Ballantyne, C. M., ; Rogers, C. (2000). Decreased neointimal formation in Mac-1;/;mice reveals a role for inflammation in vascular repair after angioplasty.;Journal of Clinical Investigation,;105(3), 293-300.

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