

Anti-Mouse CD45.1 BG Violet 450

Catalog Number :07522-40

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

Product Information

Clone: A20

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: Mouse 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 A20 monoclonal antibody reacts with the leukocytes of the CD45.1-expressing mouse strains (DA, SJL/J, RIII, and STS/A). It does not cross-react with cells that express CD45.2.

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.

The A20 antibody inhibits some of the B lymphocytes responses, from CD45.1-expressing mice, to lipopolysaccharides and antigens.

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. Shen, F.W. (1981) Monoclonal antibodies to mouse lymphocyte differentiation alloantigens. Monoclonal Antibodies and T-Cell Hybridomas: Perspectives and Technical Advances. G.J. Hämmerling, U. Hämmerling, and J.F. Kearney, editors. Elsevier/North-Holland, Amsterdam. pp. 25;31.

2. Yakura, H. I. D. E. T. A. K. A., Kawabata, I., Shen, F. W., Katagiri, M. (1986). Selective inhibition of lipopolysaccharide-induced polyclonal IgG response by monoclonal Ly-5 antibody.;The Journal of Immunology,;136(8), 2729-2733.
3. Yakura, H., Shen, F. W., Bourcet, E., Boyse, E. A. (1983). On the function of Ly-5 in the regulation of antigen-driven B cell differentiation. Comparison and contrast with Lyb-2.;The Journal of experimental medicine,;157(4), 1077-1088.