

Anti-Human/Mouse CD11b BG Violet 450

Catalog Number :03221-40

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

Product Information

Clone: M1/70

Format/Conjugate: BG Violet 450

Concentration: 0.2 mg/mL

Reactivity: Human, Mouse

Laser: Violet (405nm)

Peak Emission: 450nm

Peak Excitation: 404nm

Filter: 450/50

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

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 M1/70 monoclonal antibody specifically reacts with the 170 kDa αM integrin chain of mouse CD11b from the Mac-1 integrin (CD11b/CD18). Mac-1 binds to C3bi, CD54 (ICAM-1), and fibrinogen, and it is expressed by granulocytes, macrophages, NK cells, myeloid-derived dendritic cells, microglia, activated lymphocytes, and mouse B-1 cells. The expression is up-regulated on activated neutrophils at the same time that L-selectin is shed from the cell surface. The M1/70 antibody is used for the detection of monocytes, granulocytes, and a subset of natural killer cells in human peripheral blood.

M1/70 blocks C3bi binding and cell adherence, but not cell-mediated lysis and it cross-reacts with human CD11b.

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. Sanchez-Madrid, F., Simon, P., Thompson, S., Springer, T. A. (1983). Mapping of antigenic and functional epitopes on the alpha-and beta-subunits of two related mouse glycoproteins involved in cell interactions, LFA-1 and Mac-1. The Journal of experimental medicine,;158(2), 586-602.
2. Ault, K. A., Springer, T. A. (1981). Cross-reaction of a rat-anti-mouse phagocyte-specific monoclonal antibody (anti-Mac-1) with human monocytes and natural killer cells.;The Journal of Immunology,;126(1), 359-364.

3. Springer, T., Galfre, G., Secher, D. S., Milstein, C. (1978). Monoclonal xenogeneic antibodies to murine cell surface antigens: identification of novel leukocyte differentiation antigens.;European journal of immunology,;8(8), 539-551.