

Anti-Mouse MHC Class II (I-A/I-E) BG Violet 450

Catalog Number :86212-40

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

Product Information

Clone: M5/114.15.2

Format/Conjugate: BG Violet 450

Concentration: 0.2 mg/mL

Reactivity: Mouse

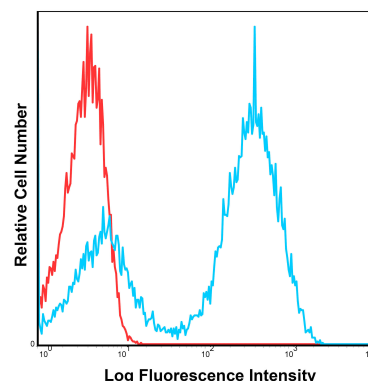
Laser: Violet (405nm)

Peak Emission: 450nm

Peak Excitation: 404nm

Filter: 450/50

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



C57BL/6 bone marrow cells were stained with BG Violet 450 M5/114.15.2 with relevant isotype control in Red.

Isotype: Rat IgG2b, kappa

Formulation: Phosphate-buffered aqueous solution, $\leq 0.09\%$ 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 M5/114.15.2 monoclonal antibody or (M5/114) is specific for the mouse major histocompatibility complex class II, specific for the I-A and I-E subregion-encoded glycoproteins (alloantigens I-Ab, I-Ad, I-Aq, I-Ed, and I-Ek, but not the I-Af, I-Ak, nor I-As antigens). The antibody also reacts with cells from the H-2p or H-2r haplotypes mice.

The polymorphic determinant represented by the mouse major histocompatibility complex class II (MHC Class II) is expressed by the immune cells bearing the specified alloantigens, like T and B lymphocytes, monocytes, dendritic cells, and macrophages. The antibody doesn't react with the NOD H-2g7 haplotype alloantigens.

M5/114 mAb inhibits I-A-restricted T cell responses of the Haplotypes H-2b, H-2d, H-2q, and H-2u.

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 μ l volume. It is

recommended that the reagent be titrated for optimal performance for each application.

References

1. Bhattacharya, A. L. O. K., Dorf, M. E., Springer, T. A. (1981). A shared alloantigenic determinant on Ia antigens encoded by the IA and IE subregions: evidence for I region gene duplication. *The Journal of Immunology*, 127(6), 2488-2495.
2. Mendiratta, S. K., Singh, N., Bal, V., Rath, S. (1996). Analysis of T-cell hybridomas with an unusual MHC class II-dependent ligand specificity. *Immunology*, 89(2), 238-244.
3. Unternaehrer, J. J., Chow, A., Pypaert, M., Inaba, K., Mellman, I. (2007). The tetraspanin CD9 mediates lateral association of MHC class II molecules on the dendritic cell surface. *Proceedings of the National Academy of Sciences*, 104(1), 234-239.