

Anti-Human CD8a BG Violet 450

Catalog Number :10121-40

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

Product Information

Clone: OKT8

Format/Conjugate: BG Violet 450

Concentration: 5 uL (0.125 ug)/test

Reactivity: Human

Laser: Violet (405nm)

Peak Emission: 450nm

Peak Excitation: 404nm

Filter: 450/50

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

Isotype: Mouse IgG2a

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 OKT8 monoclonal antibody specifically reacts with human CD8α molecule, a type I transmembrane glycoprotein of 32-34 kDa. CD8α is a member of the Ig superfamily, expressed as a homodimer (CD8αα) or as a heterodimer (CD8αβ). CD8+ αβ T lymphocytes express both CD8αα and CD8αβ, while some T lymphocytes and the natural killer cells express only the homodimers. CD8 binds to MHC class I and influences the development and the activation of T lymphocytes.

OKT8, RPA-T8, and HIT8a antibodies do not compete with each other for binding to peripheral leukocytes, meaning that they do not recognize the same epitope or block each other by steric hindrance.

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. The antibody can be used at less than or equal to 5 µL per test. A test is the amount of antibody required to stain a cell sample in the final volume of 100 µL.

References

1. Sayos, J., Wu, C., Morra, M., Wang, N., Zhang, X., Allen, D., ... Terhorst, C. (1998). The X-linked lymphoproliferative-disease gene product SAP regulates signals induced through the co-receptor SLAMF7. *Nature*, 395(6701), 462-469.

2. Thomas, Y., Sosman, J., Irigoyen, O., Friedman, S. M., Kung, P. C., Goldstein, G., Chess, L. (1980). Functional analysis of human T cell subsets defined by monoclonal antibodies. I. Collaborative T cell interactions in the immunoregulation of B cell differentiation. *The Journal of Immunology*, 125(1), 1-10.

3. Campanelli, R., Palermo, B., Garbelli, S., Mantovani, S., Lucchi, P., Necker, A., ... Giachino, C. (2002). Human CD8 co;receptor is strictly involved in MHC;peptide tetramer;TCR binding and T cell activation.;International immunology,;14(1), 39-44.