

# Anti-Human CD8a BG Violet 500

Catalog Number: 10131-45

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

## **Product Information**

Clone: RPA-T8

**Format/Conjugate:** BG Violet 500 **Concentration:** 5 uL (0.5 ug)/test

**Reactivity:** Human **Laser:** Violet (405nm)

**Peak Emission:** Not Applicable **Peak Excitation:** Not Applicable

Filter: Not Applicable

Brightness (1=dim,5=brightest): Not Applicable

Isotype: Mouse IgG1, 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 RPA-T8 monoclonal antibody specifically reacts with the human CD8a molecule, a 32 kDa cell surface receptor expressed either as a heterodimer (CD8  $\alpha/\beta$ ) or as a homodimer (CD8  $\alpha/\alpha$ ) on the majority of thymocytes, a subpopulation of mature T cells, and natural killer cells. CD8 interacts with the major histocompatibility complex class I (MHC class I) molecules on antigen-presenting cells or epithelial cells. The RPA-T8 antibody reacts with 13-48% of peripheral lymphocytes, 80% of thymocytes, and a subset of natural killer cells.

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

BG Violet 500 conjugate is an alternative to the Pacific Orange and BD Horizon V500 dyes. It is excited by the violet (405 nm) laser, with a peak emission of 500nm.

# **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  $\mu$ L per test. A test is the amount of antibody required to stain a cell sample in the final volume of 100  $\mu$ L.

## References

- 1.Knapp W;(1989) Leucocyte typing IV: white cell differentiation antigens. Oxford University Press, 1989.
- 2. Schlossman, S., L. Bloumsell, et al. eds (1995). Leucocyte Typing V: White Cell Differentiation Antigens. Oxford University Press. New York