

# Anti-Human CD4 BG Violet 450

Catalog Number: 06111-40

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

#### **Product Information**

Clone: OKT4

**Format/Conjugate:** BG Violet 450 **Concentration:** 5 uL (0.25 ug)/test

Reactivity: Human Laser: Violet (405nm) Peak Emission: 450nm Peak Excitation: 404nm

Filter: 450/50

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

Isotype: Mouse 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 OKT4 monoclonal antibody specifically binds to the CD4 receptor for the human immunodeficiency virus (HIV). CD4 is a 59 kDa single-chain transmembrane glycoprotein that expressed on the surface of most of the thymocytes, T-helper cells, and in low levels on monocytes and macrophages. CD4 is a co-receptor in the antigen-induced T cell activation (together with the MHC class II). The OKT4 and the RPA-T4 monoclonal antibodies recognize different epitopes of CD4 and they do not exhibit cross-block binding.

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  $\mu$ 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.Reinherz, E. L., Kung, P. C., Goldstein, G., Schlossman, S. F. (1979). Separation of functional subsets of human T cells by a monoclonal antibody. Proceedings of the National Academy of Sciences,;76(8), 4061-4065.
- 2. ;Knapp W;(1989) Leucocyte typing IV: white cell differentiation antigens. Oxford University Press, 1989.
- 3. Bour, S. T. E. P. H. A. N. E., Boulerice, F. R. A. N. C. O. I. S., Wainberg, M. A. (1991). Inhibition of gp160 and CD4 maturation in U937 cells after both defective and productive infections by human immunodeficiency virus type 1. Journal of virology,;65(12), 6387-6396.