

## Anti-Human CD4 BG Violet 450

Catalog Number :06121-40

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

### Product Information

**Clone:** RPA-T4

**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 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-T4 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 RPA-T4 antibody is capable of blocking HIV binding and inhibiting syncytium formation, by binding to the D1 domain of the CD4 antigen. 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 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. 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