# **Technical Data Sheet**

# Pacific Blue™ Mouse Anti-Human CD4

#### **Product Information**

 Material Number:
 558116

 Size:
 0.1 mg

 Concentration:
 0.2 mg/ml

 Clone:
 RPA-T4

 Isotype:
 Mouse IgG1, κ

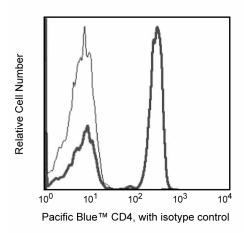
 Reactivity:
 QC Testing: Human

Workshop: IV T114

Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

#### Description

The RPA-T4 clone reacts with CD4, a 59 kDa single-chain transmembrane glycoprotein [receptor for human immunodeficiency virus (HIV)] present on T-helper/inducer cell populations. This antibody binds to the D1 domain (CDR1 and CDR3 epitopes) of the CD4 antigen and reacts with approximately 80% of thymocytes and 45% of peripheral blood lymphocytes. CD4 is also present in low density on peripheral blood monocytes. RPA-T4 is capable of blocking HIV-1, gp120, and inhibits syncytium formation.



Profile of CD4 (RPA-T4) reactivity on peripheral blood lymphocytes analyzed by flow cytometry.

### **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody is conjugated to Pacific Blue<sup>TM</sup> under optimum conditions, and unreacted Pacific Blue<sup>TM</sup> was removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

#### **Application Notes**

Application	
Flow cytometry	Routinely Tested

## **Suggested Companion Products**

Catalog Number	Name	Size	Clone
558120	Pacific Blue <sup>TM</sup> Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21

### **Product Notices**

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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- Pacific Blue<sup>TM</sup> has a maximum absorption of 416 nm and maximum emission of 451 nm. Before staining with this reagent, please confirm
  that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
- 4. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
- 5. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharmingen/colors.
- 6. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

# References

Schlossman SF, Boumsell L, Gilks W, et al, ed. Leukocyte Typing V: White Cell Differentiation Antigens. New York: Oxford University Press; 1995.(Clone-specific) Knapp W, Dorken B, Rieber EP, et al, ed. Leucocyte Typing IV. New York: Oxford University Press; 1989.(Clone-specific)

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