## PERFORMANCE DATA SHEET

1501

## Monoclonal anti-human CD4/Biotin\*



*mAb name/Clone:* M-T441 *Isotype:* Mouse IgG2b

Immunogen: P815 cell transfected with human CD4

**CATALOG#: 148-030 QUANTITY: 100 μg** 

CONCENTRATION: 1.0 mg/ml

**INFORMATION:** Human CD4 is a cell surface glycoprotein of 55 kd expressed on most thymocytes, on about two thirds of peripheral T cells, and on some monocyte macrophage lineage cells. CD4 interacts with MHC Class II molecules in an accessory role during foreign antigen recognition by T cells. The extracellular portion of CD4 is an array of four Ig-like domains. The amino terminal region of CD4 is a receptor for the HIV-1 viral protein gp120. Antibody M-T441 recognizes the domain 2 region of the CD4 molecule and reacts with human CD4 cell transfectants.

*References:* Characterized by the laboratory of Dr. E.P. Reiber. Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 476-478. R. König, et al, (1995) J Exp Med **182**: 779-787.

**STORAGE CONDITIONS:** *Store at 2 - 5<sup>o</sup>C*. Freeze/Thawing is not recommended.

**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date:\_\_\_\_\_

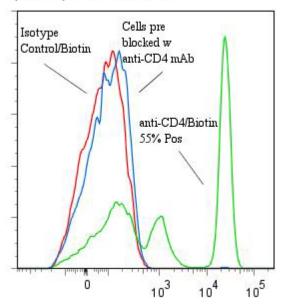
**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PRODUCTION:** Antibody from (low FBS containing) tissue culture supernatant was Protein A purified to >95% mouse immunoglobulin by SDS-PAGE (<1% bovine immunoglobulin), and reacted with NHS-Biotin.

Unconjugated Biotin was removed from conjugate using a desalting column.

**PERFORMANCE:** Five x  $10^5$  cultured **HPB-MLT** cells were washed and incubated 45 minutes on ice with 80 μl of anti-CD4/Biotin at **5 μg/ml**. Cells were then washed twice and incubated 45 minutes with 20 μl of  $2^0$  reagent Streptavidin R-Phycoerythrin (Catalog #253-050), after which they were washed three times, fixed and analyzed using a BD FACS Calibur. Cells stained positive with a mean shift of **2.34** log<sub>10</sub> fluorescent units when compared to a Mouse IgG2b/Biotin (cat# 284-030) negative control. Binding was blocked when cells were pre incubated 10 minutes with 20 μl of 0.5 mg/ml anti-CD4 (M-T441) antibody (Catalog #148-020).

## Binding of anti-CD4(clone M-T441)/Biotin (+SA/PE) to human PBMC



<sup>\*</sup> Research Use Only. Not for use in Diagnostic procedures.