

**PERFORMANCE DATA SHEET**

2236

**Monoclonal anti-human CD4/APC\*****mAb name/Clone:** M-T441**Isotype:** Mouse IgG2b**Immunogen:** P815 cell transfected with human CD4**CATALOG#:** 148-060**QUANTITY:** 120 tests**VOLUME IN VIAL:** 0.2 ml**WORKING DILUTION:** 1:50 (or use 1.6µl of concentrated stock per 5 x 10<sup>6</sup> cell/test)

**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°C. Do not freeze! Protect from light.

**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, 500 mM Potassium Chloride, 150mM NaCl, 15% 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% Immunoglobulin by SDS-PAGE, and conjugated to Allophycocyanin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at **0.25 mg/ml** with an A<sub>650</sub>/A<sub>280</sub> ratio of 2.0.

**PERFORMANCE:** Five x 10<sup>5</sup> ficoll prepared human PBMC were washed and pre incubated on ice with 20µl of 250µg/ml human IgG (to block non specific binding) after which they were incubated 45 minutes on ice with 80 µl of anti-CD4/APC at a 1:50 dilution (5 µg/ml). Cells were washed three times, fixed and analyzed by FACS. A **57%** sub population of cells stained positive with a mean shift of **2.16 log<sub>10</sub>** fluorescent units when compared to a buffer background. 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).

\* **Research Use Only. Not for use in Diagnostic procedures.**

**Binding of anti-CD4(M-T441)/APC to human PBMC**