

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°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% Na₃ (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 10⁵ 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^o 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 2.75 log₁₀ fluorescent units when compared to a Mouse IgG2b/Biotin (cat# 284-030) negative control at a similar concentration. 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).

***This Product is intended for Laboratory Research use only.**

Binding of anti-CD4/Biotin to human cell lines

