

**PERFORMANCE DATA SHEET**

2628

**Monoclonal anti-human CD1a/FITC\***

**mAb name/Clone:** CB-T6

**Isotype:** Mouse IgG1κ

**Immunogen:** Human Jurkat tumor cells

**CATALOG#:** 145-040

**QUANTITY:** 120 tests

**VOLUME IN VIAL:** 0.2ml

**WORKING DILUTION:** 1:50 (80µl/test)

**INFORMATION:** The human CD1 genetic locus consists of five closely related genes (1). Three of the gene products (CD1a, CD1b and CD1c) have been officially clustered using antibodies and are expressed on cortical thymocytes, a subset of B cells, and on most professional antigen presenting cells (2). CD1 molecules have a specialized lipid antigen-presenting function (3,4) and it is unlikely that they present conventional peptide antigens. CD1a is an important marker to help identify developmental pathways of dendritic cells (5).

**References:** (1) Leukocyte Typing III (A.J. McMichael, et al, eds.) Oxford University Press, Oxford, (1987) p. 882.

(2) Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 337-341. (3) E.M.

Beckman, et al, (1994). (4) Nature 372: 691-694. R.S. Blumberg, et al, (1995) Immunol Rev 147: 5-29. (5) T. Ito, et al,

(1999) J Immunol 163: 1409-1419.

**STORAGE CONDITIONS:** Store at 2 - 5°C. Freeze/Thawing is not recommended. 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, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PRODUCTION:** Protein A purified antibody from tissue culture supernatant was reacted with FITC. Unconjugated FITC was separated from antibody/FITC conjugate by desalting column. The antibody/FITC conjugate is at **0.5 mg/ml** with a Fluorescein / mAb ratio of 8.7.

**PERFORMANCE:** Five x 10<sup>5</sup> cultured **HPB-MLT** cells were washed and incubated 45 minutes on ice with 80 µl of anti-CD1a/FITC at a **1:50** dilution (10 µg/ml). Cells were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **0.95 log<sub>10</sub>** fluorescent units when compared to a Mouse IgG1/FITC negative control (Catalog # 278-040). Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD1a antibody (Catalog #145-020).

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

**Binding of anti-CD1a/FITC to human HPB-MLT cells**

