

PERFORMANCE DATA SHEET

1816

Monoclonal anti- human CD1a/R-PE *

mAb name/Clone: CB-T6

Isotype: Mouse IgG1κ

Immunogen: Human Jurkat tumor cells

CATALOG#: 145-050

QUANTITY: 120 tests

VOLUME IN VIAL: 0.2 ml

WORKING DILUTION: 1:50 (or use 1.6µl of concentrated stock per 5 x 10⁵-cell 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. 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% NaN₃ (as a preservative).

PRODUCTION: Protein A purified antibody from tissue culture supernatant was conjugated to R-Phycoerythrin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at 0.5 mg/ml with an A₅₆₅/A₂₈₀ ratio of 2.81.

PERFORMANCE: Five x 10⁵ cultured HPB-MLT cells were washed and incubated 45 minutes on ice with 80 µl of anti-CD1a/R-PE at a dilution factor of 1:50 (10 µg/ml). Cells were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 1.43 log₁₀ fluorescent units when compared to a Mouse IgG1/R-PE negative control (Catalog # 278-050). 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/R-PE to human HPB-MLT cells

