

# PERFORMANCE DATA SHEET

2017

## Monoclonal anti-human CD1a/Biotin\*

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

**Isotype:** Mouse IgG1κ

**Immunogen:** Human Jurkat tumor cells

**CATALOG#:** 145-030

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**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 not recommended.

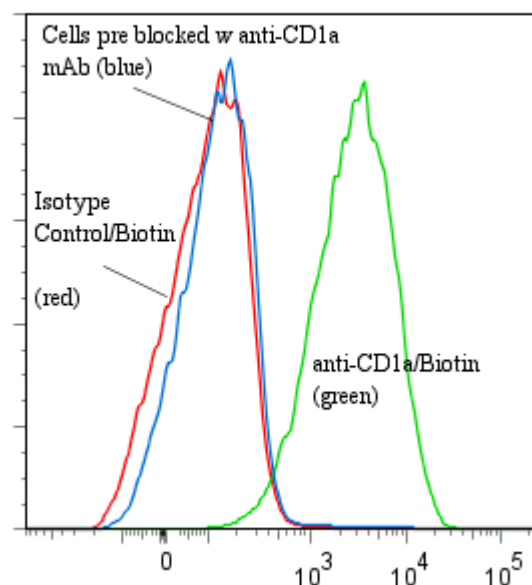
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: \_\_\_\_\_

**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<sup>5</sup> cultured human **HPB-MLT** cells were washed and incubated 45 minutes on ice with 80 µl of anti-CD1a/Biotin at 5 µg/ml. Cells were washed twice and incubated with 2<sup>o</sup> reagent Streptavidin/R-PE (Catalog #253-050) after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 1.53 log<sub>10</sub> fluorescent units when compared to a Mouse IgG1/Biotin negative control (Catalog # 278-030). Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD1a antibody (Catalog #145-020).

### Binding of anti-CD1a/Biotin +SA/PE to human HPB-MLT cells



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