

# PERFORMANCE DATA SHEET

1934

## Monoclonal anti-human CD1c/Biotin\*

**mAb name/Clone:** M241

**Isotype:** Mouse IgG1 $\kappa$

**Immunogen:** Human T cell line Molt 4

**CATALOG#:** 146-030

**QUANTITY:** 100  $\mu$ g

**CONCENTRATION:** 1.0 mg/ml

The human CD1 genetic locus consists of five closely related genes. 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. CD1 molecules have a specialized lipid antigen-presenting function and it is unlikely that they present conventional peptide antigens. CD1 may also be involved in costimulation. Antibody M241 recognizes the CD1c molecule of about 48 kd.

**References:** R.W. Knowles and W. F. Bodmer (1982) Eur J Immunol **12**: 676-681. Leukocyte Typing III (A.J. McMichael, et al, eds.) Oxford University Press, Oxford, (1987) p. 882. Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford, (1995) p. 337-341. E.M. Beckman, et al, (1994) Nature **372**: 691-694. S. Blumberg, et al, (1995) Immunol Rev **147**: 5-29. S.M. Behar, et al, (1995) J Exp Med **182**: 2007-2018.

**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 Molt-4 cells per tube were washed and incubated 45 minutes on ice with 80  $\mu$ l anti-CD1c/Biotin at 5  $\mu$ g/ml. Cells were washed twice and incubated with 2<sup>o</sup> reagent Streptavidin/R-Phycoerythrin (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 1.47 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  $\mu$ l of 0.5 mg/ml anti-CD1c antibody (Catalog #146-020).

*\*Research use only. Not for use in Diagnostic procedures.*

**Binding of anti-CD1c/Biotin+ SA/PE to human Molt-4 cells**

