

PERFORMANCE DATA SHEET

2135

Monoclonal anti-human CD1c/R-PE *

mAb name/Clone: M241

Isotype: Mouse IgG1κ

Immunogen: Human T cell line Molt 4

CATALOG#: 146-050

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. 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. 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 **0.25 mg/ml** with an A₅₆₅/A₂₈₀ ratio of 3.04.

PERFORMANCE: Five x 10⁵ cultured human **Molt-4** cells per tube were incubated 45 minutes on ice with 80 µl anti-CD1c antibody at **10 µg/ml**. Cells were washed twice and incubated with 2° reagent Goat anti-Mouse IgG/FITC (Catalog #232-011), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **1.45 log₁₀** fluorescent units when compared to a Mouse IgG1 negative control (Catalog #278-010) at a similar concentration.

***Research use only. Not for use in Diagnostic procedures** R-Phycoerythrin (R-PE) is covered under patents: U.S. 4,520,110; European 76,695 and Canadian 1,179,942.

Binding of anti-CD1c/PE to human Molt-4 cells

