

PERFORMANCE DATA SHEET

1750

Monoclonal anti-human IgM/R-PE *

mAb name/Clone: UCHB1

Isotype: Mouse IgG1

Immunogen: Prolymphocytic leukemic B cells

CATALOG#: 141-050

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: Human surface membrane bound IgM complexes with a heterodimer of transmembrane proteins of Igα and Igβ (CD79a and CD79b) to form the B cell antigen receptor (BCR). The BCR complex plays an important role in B cell development and activation. The transmembrane region of mIgM is essential for functional BCR complex assembly. Antibody UCHB1 recognizes surface expressed IgM.

References: R.J. Armitage, et al, (1988) Eur J Immunol **18**: 67-76. J. Smith-Ravin, et al, (1990) Clin Exp Immunol **82**: 181-187. A.L. DeFranco, et al, (1994) Chem Immunol **59**: 156-172. S.A. Grupp, et al, (1995) J Exp Med **181**: 161-168.

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 **0.5mg/ml** with an A₅₆₅/A₂₈₀ ratio of 2.74.

PERFORMANCE: Five x 10⁵ ficoll prepared **human peripheral white blood cells** were washed and preincubated ~5 minutes with 20µl of 250 µg/ml human Ig after which they were incubated 45 minutes on ice with 80 µl of anti-mIgM/R-PE at a dilution factor of **1:50**. Cells were washed three times, fixed and analyzed by FACS. A net **13.4%** sub population of the cells stained positive with a mean shift of **1.50** log₁₀ fluorescent units when compared to a Mouse IgG1/R-PE negative control (Catalog # 278-050) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-mIgM antibody (Catalog #141-020).

***This Product is intended for Laboratory Research use only.**

R-Phycoerythrin (R-PE) is covered under patents: U.S. 4,520,110; European 76,695 and Canadian 1,179,942.

Binding of anti-mIgM/R-PE to human cell types

