

PERFORMANCE DATA SHEET

1750

Monoclonal anti-human IgM*

mAb name/Clone: UCHB1

Isotype: Mouse IgG1

Immunogen: Prolymphocytic leukemic B cells

CATALOG#: 141-020

QUANTITY: 100 µg

CONCENTRATION: 1.0 mg/ml

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 and can deliver a costimulatory signal to B cells in vitro(1).

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. Freeze/Thawing is not recommended.

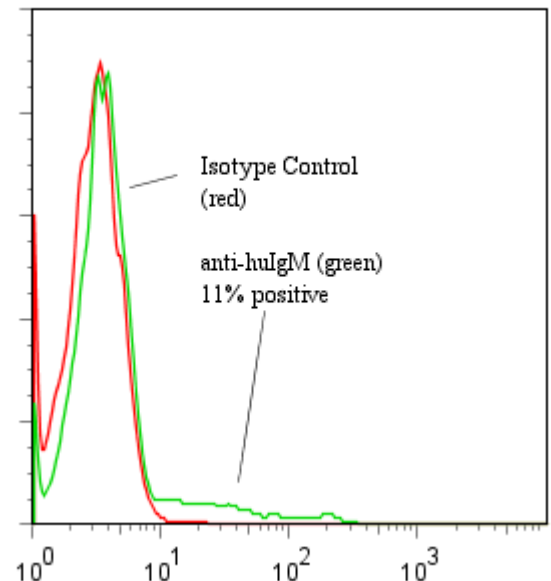
PRODUCT STABILITY: Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: _____

BUFFER: 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 0.5 mg/ml Gentamicin Sulfate (as a preservative).

PRODUCTION: Antibody was Protein A purified from (low FBS containing) tissue culture supernatant. Purity was >95% Immunoglobulin by SDS-PAGE and contains less than 1% Bovine Immunoglobulin.

PERFORMANCE: Five x 10⁵ ficoll prepared **human peripheral blood mononuclear cells** were washed and pre incubated 5 minutes with 20 µl of 250µg/ml human Ig (to block non specific binding) after which they were incubated 45 minutes on ice with 80 µl of anti-human IgM antibody at **10 µg/ml**. Cells were washed twice and incubated with 2^o reagent Goat anti-Mouse/FITC (Catalog #232-011), after which they were washed three times, fixed and analyzed by FACS using a lymphocyte gate. A net **11%** sub population of the cells stained positive with a mean shift of **1.3** log₁₀ fluorescent units when compared to a Mouse IgG1 negative control (Catalog # 278-010) at a similar concentration.

Binding of anti-human IgM + GAM/FITC to human PBMC



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