

PERFORMANCE DATA SHEET

2423

Monoclonal anti-human IgM/Biotin*

mAb name/Clone: UCHB1

Isotype: Mouse IgG1

Immunogen: Prolymphocytic leukemic B cells

CATALOG#: 141-030

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 and soluble human 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. 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% Na₃ (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 10⁵ ficoll prepared **human white blood cells** were washed and pre incubated 5 minutes with 20 µl of 250µg/ml human Ig after which they were incubated 45 minutes on ice with 80 µl of mIgM/Biotin at **10 µg/ml**. Cells were then washed twice and incubated 45 minutes with 2^o reagent Streptavidin/PE (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS. A net **4.4%** sub population of the cells stained positive with a mean shift of **1.93 log₁₀** fluorescent units when compared to Isotype Control Mouse IgG1/Biotin (Catalog # 278-030). Binding was blocked when cells were pre incubated with an excess of unlabeled anti-IgM antibody (cat #141-020).

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

Binding of anti-IgM/Biotin +SA/PE to human PBMC

