

**PERFORMANCE DATA SHEET**

2235

**Monoclonal anti-human CD38/Biotin\*****mAb name/Clone:** AT1**Isotype:** Mouse IgG1 $\kappa$ **Immunogen:** Human T cell tumor cells: CEM**CATALOG#:** 187-030**QUANTITY:** 100  $\mu$ g**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** Human CD38 is a type II transmembrane glycoprotein with bifunctional ectoenzyme activity catalyzing both synthesis and hydrolysis of cyclic ADP ribose (1). CD38 is involved in lymphocyte activation and adhesion to endothelium and has recently been identified as a counter-receptor of CD31 (2). Antibody AT1 recognizes the CD38 molecule of 45 kd.

**References:** 1.) Leukocyte Typing VI (T. Kishimoto, et al, eds.) Garland Publishing, Inc., New York (1997) p. 151-157.  
2.) S. Deaglio, et al, (1998) J Immunol 160:395-402.

**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 human **Raji** cells were washed and incubated 45 minutes on ice with 80  $\mu$ l of anti-CD38/Biotin at 5  $\mu$ g/ml. Cells were washed twice and incubated with 2<sup>o</sup> reagent Streptavidin/R-PE (Catalog #253-050) after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 1.89 log<sub>10</sub> fluorescent units when compared to a Mouse IgG1/Biotin negative control (Catalog #278-030) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20  $\mu$ l of 0.5 mg/ml anti-CD38 antibody (Catalog #187-020).

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

**Binding of anti-CD38/Biotin +SA/PE to human Raji cells**

