

**PERFORMANCE DATA SHEET**

2621

**Monoclonal anti-human CD7/Biotin\***

**mAb name/Clone:** 3A1e

**Isotype:** Mouse IgG2b

**Immunogen:** Human HSB2-T cells

**CATALOG#:** 152-030

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** Human CD7 is one of the earliest T lineage markers and is found on most thymocytes and peripheral blood T cells. The function of CD7 is not yet fully known, although cross-linking of CD7 with antibodies induces a T cell transmembrane calcium flux and CD7 expression is induced by ionomycin. Antibody 3A1e recognizes a CD7 molecule of 40 kd. Antibody 3A1e induces T cell transmembrane calcium flux.

**References:** R. Ware, et al, J Immunol (1989) **143:** 3632-3634. R. Ware, et al, J Immunol (1991) **147:** 2787-2794.

**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, 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> Ficoll prepared human peripheral blood mononuclear cells were washed and incubated 45 minutes on ice with 80 µl of anti-CD7/Biotin at 5 µg/ml. Cells were then washed twice and incubated 45 minutes with 2<sup>o</sup> reagent Streptavidin R-Phycoerythrin (Catalog #253-050), after which they were washed three times, fixed and analyzed by FACS using a lymphoid gate. An 83% sub population of the cells stained positive with a mean shift of 1.7 log<sub>10</sub> fluorescent units when compared to a Mouse IgG2b/Biotin (Catalog # 284-030) negative control. Binding was blocked when cells were pre incubated 10 minutes with 20 µl of 0.5 mg/ml anti-CD7 antibody (Catalog #152-020).

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

**Binding of anti-CD7/Biotin +SA/PE to human PBL**

