

# PERFORMANCE DATA SHEET

2415

## Monoclonal anti-human CD81(TAPA-1)/Biotin\*

**mAb name/Clone:** 1.3.3.22

**Isotype:** Mouse IgG1

**Immunogen:** Human B cell line from Burkitt lymphoma

**CATALOG#:** 302-030

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** Human CD81 is a member of the tetraspan family of leukocyte cell surface molecules which are involved in signal transduction, cell-cell adhesion, and cellular activation (1). Association of CD81 with integrins appears to be functionally important in the regulation of cell adhesion and activation (2, 3). Recent work with CD81-null mice indicates CD81 is important for development of humoral immune response (4). Antibody 1.3.3.22 reacts with the 24 kd tetraspan CD81 molecule.

**References:** (1) Leukocyte Typing V (S.F. Schlossman, et al, eds.) Oxford University Press, Oxford (1995) p. 684-691. (2) B.A. Mannion, et al, (1996) J Immunol **157**: 2039-2047. (3) S.C. Todd, et al, (1996) J Exp Med **184**: 2055-2060. 4.) H.T. Maecker & S. Levy (1997) J Exp Med **185**: 1505-1510.

**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 CEM cells were incubated 45 minutes on ice with 80 µl of anti-CD81/Biotin at 10 µg/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 2.3 log<sub>10</sub> fluorescent units when compared to a Mouse IgG1/Biotin negative control (Catalog #278-030). Binding was blocked when cells were pre incubated with 20 ul of 0.5mg/ml anti-CD81 mAb (Cat # 302-020).

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

**Binding of anti-CD81/Biotin +SA/PE to human CEM cells**

