## PERFORMANCE DATA SHEET

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## 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  $10^5$  cultured human **CEM** cells were incubated 45 minutes on ice with 80  $\mu$ l of anti-CD81/Biotin at **5 \mug/ml**. Cells were washed twice and incubated with  $2^0$  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 **2.46**  $\log_{10}$  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-CD81 antibody (Catalog #302-020).

\*This Product is intended for Laboratory Research use only.

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

