## PERFORMANCE DATA SHEET





## Monoclonal anti-human MHC Class II (HLA-DP, DQ & DR)/R-PE\*

mAb name/Clone: TDR31.1

Isotype: Mouse IgG1

Immunogen: Purified class II from JY cell line

CATALOG#: 131-050 QUANTITY: 120 tests

**VOLUME IN VIAL: 0.2 ml** 

**WORKING DILUTION: 1:50** (or use 1.6µl of concentrated stock per 5 x 10<sup>5</sup>-cell test)

**INFORMATION:** Human MHC Class II (HLA-DP, DQ & DR) molecules are expressed on dendritic cells, monocytes, macrophages, and myeloid cells. MHC Class II molecules are heterodimers of polymorphic transmembrane  $\alpha$  and  $\beta$  chains and generally bind exogenously derived peptides of about 10-17 amino acids. MHC Class II molecules interact with the T cell receptor on CD4<sup>+</sup> T cells. Antibody TDR31.1 recognizes a monomorphic class II  $\beta$  chain epitope.

*References:* T.A. de Kretser, et al, (1982) Eur J Immunol **12**: 214-221. R. Busch & J.B. Rothbard, (1990) J Immunol Methods 134: 1-22. K.W. Wacherpfennig & J.L. Strominger, (1995) J Exp Med **181**:161-168.

STORAGE CONDITIONS: Store at 2 - 5°C. Do not freeze! Protect from light.

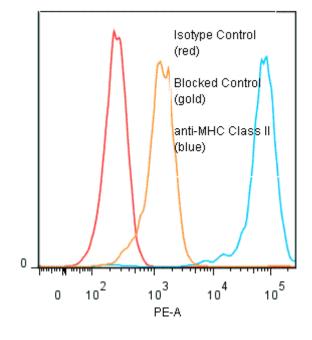
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date:\_\_\_\_\_

**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 500 mM Potassium Chloride, 150mM NaCl, 15% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

**PRODUCTION:** Protein A purified antibody from tissue culture supernatant was conjugated to R-Phycoerythrin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at **250 µg/ml** with an  $A_{565}/A_{280}$  ratio of 3.2.

**PERFORMANCE:** Five x  $10^5$  cultured **Daudi** cells were incubated 45 minutes on ice with 80  $\mu$ l of anti-MHC Class II/R-PE at a **1:50** dilution ( $5\mu$ g/ml). Cells were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **2.41**  $\log_{10}$  fluorescent units when compared to a Mouse IgG1/R-PE negative control (Catalog #278-050). Binding was blocked when cells were pre incubated 10 minutes with 20  $\mu$ l of 0.5 mg/ml anti-MHC Class II antibody (Catalog #131-020).

## Binding of anti-MHC Class II/PE to human Daudi cells



<sup>\*</sup> Research Use Only. Not for use in Diagnostic procedures.