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

*mAb name/Clone:* TDR31.1 *Isotype:* Mouse IgG1

Immunogen: Purified class II from JY cell line

CATALOG#: 131-060 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<sup>o</sup>C*. Do not freeze! Protect from light.

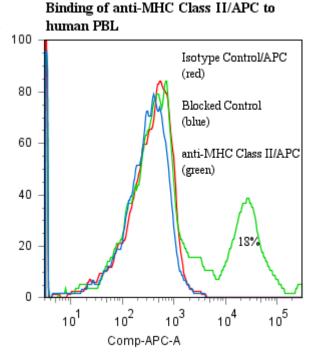
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date:\_\_\_\_\_

**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 cross-linked Allophycocyanin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at approximately **0.5 mg/ml** with an  $A_{650}/A_{280}$  ratio of 1.64.

**PERFORMANCE:** Five x  $10^5$  ficoll prepared human **peripheral blood mononuclear cells** per tube were washed and pre incubated 5 minutes with 20  $\mu$ l of 300  $\mu$ g/ml human IgG to block nonspecific binding after which they were incubated 45 minutes on ice with 80  $\mu$ l of **anti-MHC Class II/APC** at a **1:50** dilution ( $10\mu$ g/ml). Cells were washed three times, fixed and analyzed by FACS using a lymphoid gate. An **18%** sub population of the cells stained positive with a mean shift of **1.8**  $\log_{10}$  fluorescent units when compared to a buffer control. 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).

\*This Product is intended for Laboratory Research use only. Allophycocyanin (APC) is covered under patents: U.S. 4,520,110; European 76,695 and Canadian 1,179,942.



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