

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

**mAb name/Clone:** TDR31.1

**Isotype:** Mouse IgG1

**Immunogen:** Purified class II from JY cell line

**CATALOG#:** 131-030

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**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. Wachterpennig & J.L. Strominger, (1995) J Exp Med **181**:161-168.

**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% Na<sub>3</sub>N (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 **Daudi** cells were washed and pre incubated 5 minutes with 20 µl of 250 µg/ml human IgG (To block non specific binding) after which they were incubated 45 minutes on ice with 80 µl of anti-MHC Class II/Biotin at 1 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 2.40 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 10 minutes with 20 µl of 0.5 mg/ml anti-MHC Class II antibody (Catalog #131-020).

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

