HLA-DRβ (TAL 14.1): sc-53316

**BACKGROUND**
Major histocompatibility complex (MHC) class II molecules destined for presentation to CD4+ helper T cells is determined by two key events. These events include the dissociation of class II-associated invariant chain peptides (CLIP) from an antigen binding groove in MHC II-α/β dimers through the activity of MHC molecules HLA-DM and -DO, and subsequent peptide antigen binding. Accumulating in endosomal/lysosomal compartments and on the surface of B cells, HLA-DM,-DO molecules regulate the dissociation of CLIP and the subsequent binding of exogenous peptides to HLA class II molecules (HLA-DR, -DO and -DP) by sustaining a conformation that favors peptide exchange. RFLP analysis of HLA-DM genes from rheumatoid arthritis (RA) patients suggests that certain polymorphisms are genetic factors for RA susceptibility. HLA-B belongs to the HLA class I heavy chain paralogs. Class I molecules play a central role in the immune system by presenting peptides derived from the endoplasmic reticulum lumen. HLA-B and -C can form heterodimers consisting of a membrane-anchored heavy chain and a light chain (β-2-Microglobulin). Polymorphisms yield hundreds of HLA-B and -C alleles.

**REFERENCES**

**CHROMOSOMAL LOCATION**
Genetic locus: HLA-DRB1 (human) mapping to 6p21.32.

**SOURCE**
HLA-DRβ (TAL 14.1) is a mouse monoclonal antibody raised against HLA-DRβ of human origin.

**PRODUCT**
Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.
HLA-DRβ (TAL 14.1) is available conjugated to either phycoerythrin (sc-53316 PE) or fluorescein (sc-53316 FITC), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM.

**STORAGE**
Store at 4° C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**
HLA-DRβ (TAL 14.1) is recommended for detection of HLA-DRβ of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10⁶ cells).

Molecular Weight of mature chain HLA-DRβ: 30 kDa.
Positive Controls: HLA-DRβ (h3): 293T Lysate: sc-115102, NAMALWA cell lysate: sc-2234 or HuT 78 whole cell lysate: sc-2208

**DATA**

**SELECT PRODUCT CITATIONS**

**RESEARCH USE**
For research use only, not for use in diagnostic procedures.