

HLA-DP β 1 (h2): 293 Lysate: sc-176612

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 class 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 and -DO molecules regulate the dissociation of CLIP and the subsequent binding of exogenous peptides to HLA class II molecules (HLA-DR, -DQ 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

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3. Siegmund, T., et al. 1999. HLA-DM α and HLA-DM β alleles in German patients with type 1 diabetes mellitus. *Tissue Antigens* 54: 291-294.
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CHROMOSOMAL LOCATION

Genetic locus: HLA-DPB1 (human) mapping to 6p21.32.

PRODUCT

HLA-DP β 1 (h2): 293 Lysate represents a lysate of human HLA-DP β 1 transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

HLA-DP β 1 (h2): 293 Lysate is suitable as a Western Blotting positive control for human reactive HLA-DP β 1 antibodies. Recommended use: 10-20 μ l per lane.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.