

HLA-DR/DP (HL-38): sc-51616

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, -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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SOURCE

HLA-DR/DP (HL-38) is a mouse monoclonal antibody raised against Burkitt's lymphoma cell line Raji of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 μ g IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

HLA-DR/DP (HL-38) is available conjugated fluorescein (sc-51616 FITC, 100 tests in 2 ml), for IF, IHC(P) and FCM.

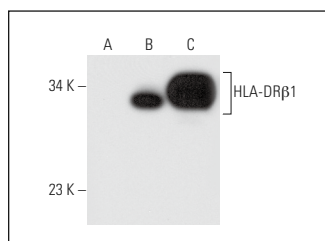
APPLICATIONS

HLA-DR/DP (HL-38) is recommended for detection of common epitope on β -chain of HLA-DR and HLA-DP of human origin by Western Blotting (non-reducing) (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and flow cytometry (1 μ g per 1 x 10⁶ cells).

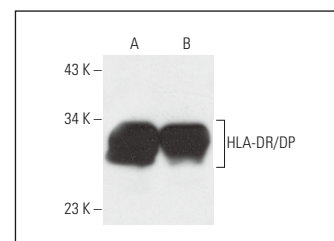
Molecular Weight of HLA-DR β : 30/29 kDa.

Positive Controls: HuT 78 whole cell lysate: sc-2208, Raji whole cell lysate: sc-364236 or HLA-DR β 1 (h3): 293T Lysate: sc-115102.

DATA



HLA-DR/DP (HL-38): sc-51616. Western blot analysis of HLA-DR β 1 expression in non-transfected 293T: sc-117752 (A), human HLA-DR β 1 transfected 293T: sc-115102 (B) and BJAB (C) whole cell lysates.



HLA-DR/DP (HL-38): sc-51616. Western blot analysis of HLA-DR/DP expression in Raji (A) and HuT 78 (B) whole cell lysates.

STORAGE

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

PROTOCOLS

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



See **HLA-DR (520B): sc-69673** for HLA-DR antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.