



# HLA-DP/DR/DQ (7.5.10.1): sc-59238

## BACKGROUND

Major histocompatibility complex (MHC) molecules, which include human leukocyte antigens (HLAs), form an integral part of the immune response system. They are cell-surface receptors that bind foreign peptides and present them to cytotoxic T lymphocytes (CTLs). MHC class I molecules consist of two polypeptide chains, an  $\alpha$  or heavy chain and a non-covalently associated protein,  $\beta$ -2-Microglobulin. MHC class II molecules consist of a non-covalent complex of an  $\alpha$  and  $\beta$  chain. The differential structural properties of MHC class I and class II molecules account for their respective roles in activating different populations of T lymphocytes. HLAs are polymorphic proteins that are involved in the presentation of antigens: to the T cell receptor. There are two classes of HLA antigens, class I (HLA-A, HLA-B and HLA-C) and class II (HLA-DP, -DR and -DQ).

## REFERENCES

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## STORAGE

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

## CHROMOSOMAL LOCATION

Genetic locus: HLA-DQA1 (human) mapping to 6p21.32.

## SOURCE

HLA-DP/DR/DQ (7.5.10.1) is a mouse monoclonal antibody raised against lymphocytes of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

HLA-DP/DR/DQ (7.5.10.1) is recommended for detection of HLA-DR, HLA-DP and HLA-DQ of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
1) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.