



# Anti-HLA DP DQ DR monoclonal antibody, clone XS29 (DMABT-48795MH)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Mouse Anti Human HLA DP DQ DR Mouse Anti Human HLA DP DQ DR
<b>Immunogen</b>	Human HLA Class II (DP, DQ, DR)
<b>Isotype</b>	IgG2a
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	XS29
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	IHC, ELISA, FC, FuncS, IP, WB
<b>Format</b>	Purified IgG - liquid
<b>Concentration</b>	IgG concentration 1 mg/ml
<b>Size</b>	200 µg
<b>Buffer</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide
<b>Storage</b>	Store at +4 °C or at -20 °C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

# BACKGROUND

## Introduction

The human leucocyte antigen (HLA) system, originally discovered as the result of a transfusion reaction, is now known to play a crucial role in many areas of clinical medicine. The HLA molecules are encoded by a cluster of tightly linked genes located on the short arm of chromosome 6. Based on some of the structural and functional characteristics of the genes, the region has been divided into three: HLA class I, Class II and class III regions. The A and B genes of the HLA class II, DP, DQ and DR encode a heterodimer formed by two noncovalently associated  $\alpha$  and  $\beta$  chains of approximately 34 and 39 kDa respectively. The main function of the HLA-DP, DQ and DR molecules is to present antigenic peptides, mostly of exogenous nature, to CD4+ T-cells. HLA molecules are also known to be associated with a variety of autoimmune, non-autoimmune and infectious diseases and to restrict the antibody response to certain antigens and vaccines. HLA-DP, DQ and DR molecules are constitutively expressed on antigen-presenting cells (APC) such as B lymphocytes, monocytes and dendritic cells but can also be detected on cytotoxic/suppressor T lymphocytes and activated granulocytes. It is uncertain whether HLA-DP, DQ and DR antigens are also expressed on activated platelets. HLA class II expression can also be induced on cells and tissues such as fibroblasts and endothelial cells as a result of activation and/or by certain cytokines such as  $\gamma$ -interferon, tumor necrosis factor and interleukin-10. The antigen has been found on the cell surface of leukaemic blasts from cases of B-cell acute lymphoblastic leukaemia (ALL), T-cell pre-ALL, acute myeloid leukaemia (AML) except AML-M3, and chronic B and T cell leukaemia, chronic myeloid leukaemia (CML) in blast crisis and lymphomas of B cell and cell type. HLA-DP, DQ, DR antigen is normally not present on nonhaematopoietic tumors and multiple myeloma.

## Keywords

DP beta 1 chain; DP(W4) beta chain; CD; CELIAC 1; CELIAC1; DPB1; DPB\_1; DQ A1; DRB1; DRB4; FLJ27088; FLJ27328; GSE; HLA class II histocompatibility antigen; HLA class II histocompatibility antigen DR 1 beta; HLA class II histocompatibility antigen DR alpha; HLA class II histocompatibility antigen DR alpha chain; HLA DP histocompatibility type beta 1 subunit; HLA DP1B; HLA DPB1; HLA DQA; HLA DQA1; HLA DQB; HLA DQB1; HLA DR1B; HLA DR3B; HLA DR4B; HLA DRA; HLA DRA1; HLA DRB1; HLA DRB3; HLA DRB4; HLA DRB5; HLA-DPB1; IDDM 1; Major histocompatibility complex class II DP beta 1; Major histocompatibility complex class II DQ alpha 1; Major histocompatibility complex class II DQ beta 1; Major histocompatibility complex class II DR alpha; Major histocompatibility complex class II DR beta 1; Major histocompatibility complex class II DR beta 3; Major histocompatibility complex class II DR beta 4; Major histocompatibility complex class II DR beta 5; MGC117330; MHC class II antigen DPB1; MHC class II antigen DRA; MHC class II HLA DQ alpha 1; MHC class II HLA DR beta 1; MHC class II HLA DR beta 3; MHC DPB1; MHC DQ beta; MHC HLA DPB1; MHC HLA DQ alpha