



Anti-HLA DR monoclonal antibody, clone IM-40 [R-PE] (DMABT-48807MH)

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

PRODUCT INFORMATION

Product Overview	Mouse Anti Human HLA DR, RPE
Isotype	IgG3
Source/Host	Mouse
Species Reactivity	Human
Clone	IM-40
Conjugate	PE
Applications	FC
Reconstitution	Reconstitute with 1.0 ml distilled water
Format	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilised
Size	100 tests
Buffer	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Storage	Prior to reconstitution store at +4 °C. Following reconstitution store at +4 °C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

BACKGROUND

Introduction

The main function of human leucocyte antigen (HLA) molecules is to present antigenic peptides to the T-cell receptor, thereby regulating the induction of the immune response. The HLA molecules are encoded by a cluster of tightly linked genes located on the short arm of chromosome 6. Three classes of HLA molecules (I, II and III) have been denoted. Human class II genes are located in the HLA-D region, consisting of three families called DQ, DP and DR. The products of class II genes form a heterodimeric transmembrane protein, consisting of a heavy (~34 kDa) α -chain and a light (~28 kDa) β -chain. The DR α -chain is expressed from one non-polymorphic gene, whereas the DR β -chain originates from nine highly polymorphic genes. HLA-DR antigen is constitutively expressed on antigen-presenting cells, such as B lymphocytes, monocytes and dendritic cells but can also be detected on activated T lymphocytes and activated granulocytes. Occasionally, natural killer cells express HLA-DR antigen. The antigen has been found expressed in cases of different types of acute lymphoblastic leukaemias, acute myeloid leukaemias except AML-M3, chronic lymphoblastic leukaemias, chronic myeloid leukaemias and B- and T-cell non-Hodgkin's leukaemias. However, the antigen is normally not present on non-haematopoietic tumours and multiple myelomas.

Keywords

DR alpha chain precursor; DRB1; DRB4; HLA class II histocompatibility antigen; HLA class II histocompatibility antigen DR alpha chain; HLA DR1B; HLA DR3B; HLA DRA; HLA DRA1; HLA DRB1; HLA DRB3; HLA DRB4; HLA DRB5; HLADR4B; HLADRA1; HLADRB; 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 cell surface glycoprotein; MHC class II antigen DRA; MHC II