

HLA-DP monoclonal antibody, clone SPM421

Catalog # MAB13075

Size 100 ug

Specification

Product Description	Mouse monoclonal antibody raised against native human HLA-DP.
Immunogen	Human non-T/non-B-cell-type acute lymphoblastic leukemia REH6 cell line.
Host	Mouse
Reactivity	Human
Specificity	Recognizes a non-polymorphic determinant of DP-MHC class II. MHC class II antigens are transmembrane glycoproteins of non-covalently linked alpha (33-35 kDa) and beta (27-30 kDa) chains. It reportedly reacts with B- & non-T, non-B cell lines but not with T- and myeloid cell lines and leukemias. Differential expression of MHC class II antigens on fetal and adult lymphocytes, malignant B cells appears to reflect the stage of cell differentiation which may be useful in the study of lymphoproliferative disorders.
Form	Liquid
Purification	Protein A/G purification
Isotype	IgG2b, kappa
Recommend Usage	Flow Cytometry (0.5-1 ug/10 ⁶ cells in 0.1 mL) Immunofluorescence (0.5-1 ug/mL) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (0.5-1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In 10 mM PBS (0.05% BSA, 0.05% sodium azide).
Storage Instruction	Store at 4°C.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

- Immunofluorescence
- Flow Cytometry

Gene Info — HLA-DPB1

Entrez GeneID [3115](#)

Protein Accession# [P04440](#)

Gene Name HLA-DPB1

Gene Alias DPB1, HLA-DP1B

Gene Description major histocompatibility complex, class II, DP beta 1

Omim ID [142858](#)

Gene Ontology [Hyperlink](#)

Gene Summary

HLA-DPB belongs to the HLA class II beta chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DPA) and a beta chain (DPB), both anchored in the membrane. It plays a central role in the immune system by presenting peptides derived from extracellular proteins. Class II molecules are expressed in antigen presenting cells (APC: B lymphocytes, dendritic cells, macrophages). The beta chain is approximately 26-28 kDa and its gene contains 6 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, exon 4 encodes the transmembrane domain and exon 5 encodes the cytoplasmic tail. Within the DP molecule both the alpha chain and the beta chain contain the polymorphisms specifying the peptide binding specificities, resulting in up to 4 different molecules. [provided by RefSeq]

Other Designations

HLA DP14-beta chain|HLA-DP histocompatibility type, beta-1 subunit|MHC HLA DPB1|MHC class II HLA-DP-beta|MHC class II HLA-DP-beta-1|MHC class II HLA-DRB1|MHC class II antigen DP beta 1 chain|MHC class II antigen DPbeta1|MHC class II antigen beta chain|OTT

Pathway

- [Allograft rejection](#)
- [Antigen processing and presentation](#)
- [Asthma](#)
- [Autoimmune thyroid disease](#)
- [Cell adhesion molecules \(CAMs\)](#)

- [Graft-versus-host disease](#)
- [Systemic lupus erythematosus](#)
- [Type I diabetes mellitus](#)

Disease

- [Acute Disease](#)
- [Antiphospholipid Syndrome](#)
- [Arthritis](#)
- [Asthma](#)
- [Autoimmune Diseases](#)
- [Berylliosis](#)
- [Biliary Atresia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Chronic Disease](#)
- [Coronary Aneurysm](#)
- [Cytomegalovirus Infections](#)
- [Dengue](#)
- [Diabetes Mellitus](#)
- [Disease Susceptibility](#)
- [Edema](#)
- [Endometriosis](#)

- [Epstein-Barr Virus Infections](#)
- [Exanthema](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulonephritis](#)
- [Graft vs Host Disease](#)
- [Graves Disease](#)
- [Hematologic Neoplasms](#)
- [Hemophilia A](#)
- [Hemophilia B](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Leishmaniasis](#)
- [Leukemia](#)
- [Lipodystrophy](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Malaria](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Myeloma](#)

- [Multiple Sclerosis](#)
- [Myelitis](#)
- [Nasopharyngeal Neoplasms](#)
- [Neuromyelitis Optica](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Optic Neuritis](#)
- [Pancreatitis](#)
- [Papillomavirus Infections](#)
- [Periodontitis](#)
- [Precursor B-Cell Lymphoblastic Leukemia-Lymphoma](#)
- [Pulmonary Embolism](#)
- [Pulmonary Fibrosis](#)
- [Recurrence](#)
- [Respiratory Hypersensitivity](#)
- [Sarcoidosis](#)
- [Scleroderma](#)
- [Silicosis](#)
- [Spondylitis](#)
- [Thromboangiitis Obliterans](#)
- [Thromboembolism](#)
- [Tuberculosis](#)
- [Tumor Virus Infections](#)
- [Urticaria](#)
- [Uterine Cervical Neoplasms](#)
- [Uveitis](#)

- [Venous Thrombosis](#)
- [Wegener Granulomatosis](#)