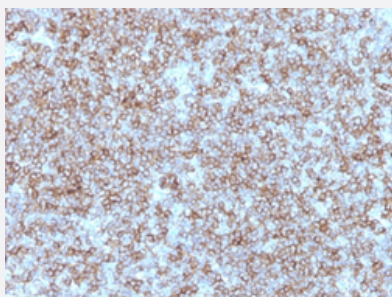


HLA-DP/HLA-DR monoclonal antibody, clone Bra-14

Catalog # MAB13304 Size 100 ug

Applications



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

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human tonsil with HLA-DP/HLA-DR monoclonal antibody, clone Bra-14 (Cat # MAB13304).

Specification

Product Description Mouse monoclonal antibody raised against native human HLA-DP/HLA-DR.

Immunogen Human REH cells.

Host Mouse

Theoretical MW (kDa) 36, 27

Reactivity Human

Specificity Reacts with a common epitope of human major histocompatibility (MHC) class II antigens, HLA-DP and HLA-DR. Human MHC class II antigens are transmembrane glycoproteins composed of an alpha chain (36 kDa) and a beta chain (27 kDa). They are expressed primarily on antigen presenting cells such as B lymphocytes, monocytes, macrophages, and thymic epithelial cells and are also present on activated T lymphocytes. Human MHC class II genes are located in the HLA-D region that encodes at least six and ten chain genes. Three loci, DP, DQ and DR, encode the major expressed products of the human class II region. The human MHC class II molecules bind intracellularly processed peptides and present them to T helper cells. They, therefore, have a critical role in the initiation of the immune response. It has been shown that some autoimmune diseases are associated with certain class II alleles.

Form Liquid

Purification	Protein A/G purification
Isotype	IgG3, 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.
Storage Instruction	Store at -20 to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

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

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of human tonsil with HLA-DP/HLA-DR monoclonal antibody, clone Bra-14 (Cat # MAB13304).

- Immunofluorescence

- Flow Cytometry

Gene Info — HLA-DPB1

Entrez GeneID	3115
Protein Accession#	P04440;P01903
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

Gene Info — HLA-DRA

Entrez GeneID

[3122](#)

Protein Accession#

[P04440;P01903](#)

Gene Name

HLA-DRA

Gene Alias

HLA-DRA1

Gene Description

major histocompatibility complex, class II, DR alpha

Omim ID

[142860](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

HLA-DRA is one of the HLA class II alpha chain paralogues. This class II molecule is a heterodimer consisting of an alpha and a beta chain, 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 alpha chain is approximately 33-35 kDa and its gene contains 5 exons. Exon 1 encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, and exon 4 encodes the transmembrane domain and the cytoplasmic tail. DRA does not have polymorphisms in the peptide binding part and acts as the sole alpha chain for DRB1, DRB3, DRB4 and DRB5. [provided by RefSeq]

Other Designations

HLA class II histocompatibility antigen, DR alpha chain|MHC cell surface glycoprotein|histocompatibility antigen HLA-DR alpha

Pathway

- [Allograft rejection](#)

- [Allograft rejection](#)
- [Antigen processing and presentation](#)
- [Antigen processing and presentation](#)
- [Asthma](#)
- [Asthma](#)
- [Autoimmune thyroid disease](#)
- [Autoimmune thyroid disease](#)
- [Cell adhesion molecules \(CAMs\)](#)
- [Cell adhesion molecules \(CAMs\)](#)
- [Graft-versus-host disease](#)
- [Graft-versus-host disease](#)
- [Hematopoietic cell lineage](#)
- [Systemic lupus erythematosus](#)
- [Systemic lupus erythematosus](#)
- [Type I diabetes mellitus](#)
- [Type I diabetes mellitus](#)

Disease

- [Abortion](#)
- [Acute Disease](#)
- [Alzheimer disease](#)
- [Anticipation](#)
- [Antiphospholipid Syndrome](#)
- [Arthritis](#)
- [Arthritis](#)
- [Asthma](#)

- [Asthma](#)
- [Atherosclerosis](#)
- [Atrial Fibrillation](#)
- [Autoimmune Diseases](#)
- [Berylliosis](#)
- [Biliary Atresia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchial Hyperreactivity](#)
- [Bronchiolitis](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Cerebral Amyloid Angiopathy](#)
- [Cerebrovascular Accident](#)
- [Chronic Disease](#)
- [Colitis](#)
- [Coronary Aneurysm](#)
- [Crohn Disease](#)
- [Cytomegalovirus Infections](#)
- [Dengue](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)

- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Disease Susceptibility](#)
- [Drug Hypersensitivity](#)
- [Edema](#)
- [Edema](#)
- [Endometriosis](#)
- [Enterovirus Infections](#)
- [Epstein-Barr Virus Infections](#)
- [Exanthema](#)
- [Food Hypersensitivity](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulonephritis](#)
- [Graft vs Host Disease](#)
- [Graves Disease](#)
- [Hematologic Neoplasms](#)
- [Hemophilia A](#)
- [Hemophilia B](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [Hepatitis C](#)
- [HIV Infections](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Hypersensitivity](#)

- [Hypersensitivity](#)
- [Hypertension](#)
- [IgA Deficiency](#)
- [Latex Hypersensitivity](#)
- [Leishmaniasis](#)
- [Leukemia](#)
- [Lichen Planus](#)
- [Lipodystrophy](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Malaria](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [Multiple Sclerosis](#)
- [Myasthenia Gravis](#)
- [Myelitis](#)
- [Nasopharyngeal Neoplasms](#)
- [Neuroblastoma](#)
- [Neuromyelitis Optica](#)
- [Obesity](#)
- [Obesity](#)
- [Occupational Diseases](#)

- [Optic Neuritis](#)
- [Pancreatitis](#)
- [Papillomavirus Infections](#)
- [Parkinson Disease](#)
- [Periodontitis](#)
- [Precursor B-Cell Lymphoblastic Leukemia-Lymphoma](#)
- [Pulmonary Embolism](#)
- [Pulmonary Fibrosis](#)
- [Recurrence](#)
- [Respiratory Hypersensitivity](#)
- [Respiratory Tract Infections](#)
- [Sarcoidosis](#)
- [Sarcoidosis](#)
- [Scleroderma](#)
- [Silicosis](#)
- [Spondylitis](#)
- [Spondylitis](#)
- [Thromboangiitis Obliterans](#)
- [Thromboembolism](#)
- [Tuberculosis](#)
- [Tumor Virus Infections](#)
- [Urticaria](#)
- [Uterine Cervical Neoplasms](#)
- [Uveitis](#)
- [Uveomeningoencephalitic Syndrome](#)

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