

HLA-A2 monoclonal antibody, clone BB7.2 (PE)

Catalog # MAB5141

Size 100 Reactions

Specification

Product Description	Mouse monoclonal antibody raised against HLA-A2.
Immunogen	HLA-A2.
Host	Mouse
Reactivity	Human
Specificity	This antibody recognizes an epitope at the C-terminus of alpha-2 helix and a turn on one of the underlying beta strands within the human HLA-A2 histocompatibility antigen.
Form	Liquid
Conjugation	PE
Isotype	IgG2b
Recommend Usage	Flow Cytometry analysis of human blood cells using 20 ul reagent / 100 ul of whole blood or 10^6 cells in a suspension. The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.2% BSA, 0.09% sodium azide)
Storage Instruction	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Flow Cytometry

Gene Info — HLA-A

Entrez GeneID [3105](#)

Gene Name HLA-A

Gene Alias HLAA

Gene Description major histocompatibility complex, class I, A

Omim ID [106300](#) [142800](#) [608579](#)

Gene Ontology [Hyperlink](#)

Gene Summary HLA-A belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). The heavy chain is anchored in the membrane. Class I molecules play a central role in the immune system by presenting peptides derived from the endoplasmic reticulum lumen. They are expressed in nearly all cells. The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon 1 encodes the leader peptide, exons 2 and 3 encode the alpha1 and alpha2 domains, which both bind the peptide, exon 4 encodes the alpha3 domain, exon 5 encodes the transmembrane region, and exons 6 and 7 encode the cytoplasmic tail. Polymorphisms within exon 2 and exon 3 are responsible for the peptide binding specificity of each class one molecule. Typing for these polymorphisms is routinely done for bone marrow and kidney transplantation. Hundreds of HLA-A alleles have been described. [provided by RefSeq]

Other Designations HLA class I histocompatibility antigen, A-23 alpha chain|MHC class I antigen HLA-A heavy chain|MHC leukocyte antigen|OTTHUMP00000161059|antigen presenting molecule|leucocyte antigen class II|leukocyte antigen class I-A

Publication Reference

- [A simplified PCR-SSP method for HLA-A2 subtype in a population of Wuhan, China.](#)

Liang B, Zhu L, Liang Z, Weng X, Lu X, Zhang C, Li H, Wu X.

Cellular & Molecular Immunology 2006 Dec; 3(6):453.

- [Induction of ovarian tumor-specific CD8+ cytotoxic T lymphocytes by acid-eluted peptide-pulsed autologous dendritic cells.](#)

Santin AD, Bellone S, Ravaggi A, Pecorelli S, Cannon MJ, Parham GP.

Obstetrics and Gynecology 2000 Sep; 96(3):422.

Application: Incubated, Recombinant protein

- [Isolation of broadly reactive, tumor-specific, HLA Class-I restricted CTL from blood lymphocytes of a breast cancer patient.](#)

Verdegaal EM, Huinink DB, Hoogstraten C, Marijnissen AK, Gorsira MB, Claas FH, Osanto S.

Human Immunology 1999 Dec; 60(12):1195.

- [Juvenile arthritis, HLA-A2 and binding of DEK oncogene-peptides.](#)

Forero L, Zwirner NW, Fink CW, Fernandez-Vina MA, Stastny P.

Human Immunology 1998 Jul; 59(7):443.

Application: Flow Cyt, Human, T2 cells

- [A recombinant single-chain HLA-A2.1 molecule, with a cis active beta-2-microglobulin domain, is biologically active in peptide binding and antigen presentation.](#)

Lee L, Loftus D, Appella E, Margulies DH, Mage M.

Human Immunology 1996 Aug; 49(1):28.

Application: Flow Cyt, Func, Human, KJ29, KJ29.β2m, KJ29.MSCβA2.1

Pathway

- [Allograft rejection](#)
- [Antigen processing and presentation](#)
- [Autoimmune thyroid disease](#)
- [Cell adhesion molecules \(CAMs\)](#)
- [Endocytosis](#)
- [Graft-versus-host disease](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Type I diabetes mellitus](#)

Disease

- [Abortion](#)
- [Abruptio Placentae](#)
- [Acquired Immunodeficiency Syndrome](#)

- [Acute Disease](#)
- [Addison Disease](#)
- [Adenocarcinoma](#)
- [Adenovirus Infections](#)
- [Agranulocytosis](#)
- [AIDS-Related Opportunistic Infections](#)
- [Alcoholism](#)
- [Alopecia Areata](#)
- [Alveolar Bone Loss](#)
- [Alzheimer disease](#)
- [Anemia](#)
- [Aortic Aneurysm](#)
- [Aortic Diseases](#)
- [Arterial Occlusive Diseases](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Autistic Disorder](#)
- [Autoimmune Diseases](#)
- [Autonomic Nervous System Diseases](#)
- [Behcet Syndrome](#)
- [Biliary Atresia](#)
- [Bipolar Disorder](#)
- [Birth Weight](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)

- [Breast Neoplasms](#)
- [Bronchiectasis](#)
- [Bronchiolitis](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Cervical Intraepithelial Neoplasia](#)
- [Chagas Cardiomyopathy](#)
- [Chagas Disease](#)
- [Chlamydophila Infections](#)
- [Cholangitis](#)
- [Choroidal Neovascularization](#)
- [Chronic Disease](#)
- [Churg-Strauss Syndrome](#)
- [Colitis](#)
- [Common Variable Immunodeficiency](#)
- [Complex Regional Pain Syndromes](#)
- [Conjunctivitis](#)
- [Connective Tissue Diseases](#)
- [Coronary Aneurysm](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Crohn Disease](#)
- [Cytomegalovirus Infections](#)

- [Cytomegalovirus Retinitis](#)
- [Dengue](#)
- [Dermatitis](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Drug Eruptions](#)
- [Drug Hypersensitivity](#)
- [Drug Toxicity](#)
- [Drug-Induced Liver Injury](#)
- [Duchenne muscular dystrophy](#)
- [Duodenal Ulcer](#)
- [Dystonia](#)
- [Encephalitis](#)
- [Encephalomyelitis](#)
- [Endometriosis](#)
- [Enterovirus Infections](#)
- [Epidermal Necrolysis](#)
- [Epilepsy](#)
- [Epstein-Barr Virus Infections](#)
- [Esophageal Neoplasms](#)
- [Exanthema](#)
- [Eye Diseases](#)
- [Eye Infections](#)
- [Fibrosis](#)

- [Gastritis](#)
- [Gastrointestinal Diseases](#)
- [Genetic Diseases](#)
- [Genetic Predisposition to Disease](#)
- [Gingival Hemorrhage](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Glomerulonephritis](#)
- [Graft vs Host Disease](#)
- [Graves Disease](#)
- [Head and Neck Neoplasms](#)
- [Heart Failure](#)
- [Helicobacter Infections](#)
- [Hemangioma](#)
- [Hematologic Diseases](#)
- [Hematologic Neoplasms](#)
- [Hemochromatosis](#)
- [Hemoglobinuria](#)
- [Hemophilia A](#)
- [Hemophilia B](#)
- [Hemosiderosis](#)
- [Hepatitis](#)
- [Hepatitis A](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [Hepatitis D](#)

- [Hereditary hemochromatosis](#)
- [Herpes Zoster](#)
- [Herpesviridae Infections](#)
- [Histoplasmosis](#)
- [HIV Infections](#)
- [HIV Seropositivity](#)
- [Hodgkin Disease](#)
- [HTLV-I Infections](#)
- [Hyperplasia](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [IgA Deficiency](#)
- [IgG Deficiency](#)
- [Infection](#)
- [Infectious Mononucleosis](#)
- [Inflammation](#)
- [Iron Overload](#)
- [Joint Diseases](#)
- [Keloid](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Knee Injuries](#)
- [Leprosy](#)
- [Leptospirosis](#)
- [Leukemia](#)
- [Leukemia-Lymphoma](#)

- [Lipodystrophy](#)
- [Liver Cirrhosis](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Macular Degeneration](#)
- [Malaria](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Menkes syndrome](#)
- [Metabolic Syndrome X](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Sclerosis](#)
- [Muscular Dystrophy](#)
- [Myasthenia Gravis](#)
- [Mycobacterium avium-intracellulare Infection](#)
- [Myelodysplastic Syndromes](#)
- [Myositis](#)
- [Nasal Polyps](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)

- [Neoplasms](#)
- [Neovascularization](#)
- [Nephrosis](#)
- [Nephrotic Syndrome](#)
- [Neuralgia](#)
- [Neuroblastoma](#)
- [Neuromyelitis Optica](#)
- [Nut Hypersensitivity](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Optic Neuritis](#)
- [Oral Submucous Fibrosis](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pancreatitis](#)
- [Papilloma](#)
- [Papillomavirus Infections](#)
- [Paraneoplastic Syndromes](#)
- [Paraparesis](#)
- [Paroxysmal nocturnal hemoglobinuria](#)
- [Pars Planitis](#)
- [Pemphigus](#)
- [Penile Induration](#)

- [Periodontal Attachment Loss](#)
- [Periodontitis](#)
- [Photosensitivity Disorders](#)
- [Pityriasis Rosea](#)
- [Polycystic Ovary Syndrome](#)
- [Porphyria](#)
- [Porphyria Cutanea Tarda](#)
- [Postoperative Complications](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Proteinuria](#)
- [Psoriasis](#)
- [Psychotic Disorders](#)
- [Pulmonary Disease](#)
- [Pulmonary Embolism](#)
- [Purpura](#)
- [Recurrence](#)
- [Respiratory Tract Infections](#)
- [Retroperitoneal Fibrosis](#)
- [Rheumatic Diseases](#)
- [Rheumatic Heart Disease](#)
- [Salivary Gland Diseases](#)
- [Sarcoidosis](#)
- [Sarcoma](#)

- [Schizophrenia](#)
- [Severe Acute Respiratory Syndrome](#)
- [Sexually Transmitted Diseases](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Small Cell Lung Carcinoma](#)
- [Spinal Cord Diseases](#)
- [Spondylarthritis](#)
- [Spondylarthropathies](#)
- [Spondylitis](#)
- [Stevens-Johnson Syndrome](#)
- [Stomach Neoplasms](#)
- [Stomatitis](#)
- [Substance Abuse](#)
- [Temporomandibular Joint Disorders](#)
- [Thromboembolism](#)
- [Thrombophlebitis](#)
- [Thymoma](#)
- [Thymus Neoplasms](#)
- [Thyroiditis](#)
- [Translocation](#)
- [Tuberculosis](#)
- [Tumor Virus Infections](#)
- [Urticaria](#)
- [Uterine Cervical Neoplasms](#)
- [Uveitis](#)

- [Uveomeningoencephalitic Syndrome](#)
- [Venous Thrombosis](#)
- [Viremia](#)
- [Vitiligo](#)