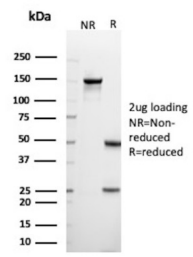
HLA-DR Antibody Bra30 / MHC Class II Antibody [clone Bra30] (V7844)

Catalog No.	Formulation	Size
V7844-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7844-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7844SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	Bra30
Purity	Protein G affinity chromatography
UniProt	P01911
Applications	Flow cytometry: 1-2ug/10^6 cells
Limitations	This HLA-DR Antibody Bra30 / MHC Class II Antibody is available for research use only.



Purified HLA-DR Antibody Bra30 SDS-PAGE. Electrophoretic analysis of 2 ug of purified HLA-DR Antibody clone Bra30 under non-reducing (NR) and reducing (R) conditions. Under non-reducing conditions, the intact antibody migrates at approximately 140-150 kDa. Under reducing conditions, bands are detected at approximately 50 kDa and 25 kDa, corresponding to the immunoglobulin heavy and light chains, respectively. The observed banding pattern supports the integrity and purity of the purified Bra30 monoclonal antibody.

Description

HLA-DR Antibody Bra30 / MHC Class II Antibody recognizes HLA-DR, a major histocompatibility complex (MHC) class II molecule with a central role in antigen presentation and adaptive immune responses. HLA-DR is a heterodimeric cell-

surface glycoprotein composed of an alpha chain encoded by HLA-DRA and a beta chain encoded by an HLA-DRB gene. Together, these chains form a peptide-binding complex that presents extracellularly derived antigenic peptides to CD4-positive T cells. Recognition of peptide-loaded HLA-DR by the T cell receptor contributes to the activation and regulation of antigen-specific immune responses.

HLA-DR is constitutively expressed by professional antigen-presenting cells, including B cells, monocytes, macrophages and dendritic cells. Expression can also be induced on additional cell populations during immune activation and inflammatory signaling. The abundance and distribution of HLA-DR are therefore widely investigated in studies of antigen-presenting cells, immune activation, transplantation, infectious disease, autoimmunity and cancer. Altered HLA-DR expression can influence communication between antigen-presenting cells and CD4-positive T cells and is an important feature of immune regulation within inflammatory and tumor microenvironments.

Clone Bra30 is a mouse monoclonal antibody characterized against a non-polymorphic determinant of HLA-DR. Published characterization placed Bra30 within a group of monoclonal antibodies recognizing an antigenic site detected on HLA-DR molecules rather than HLA-DP or HLA-DQ. Recognition of this site was reported to depend on the conformation and/or association of the HLA class II heavy and light chains, supporting interpretation of Bra30 as an antibody against an HLA-DR-associated conformational determinant rather than an allele-specific HLA-DRB reagent.

NSJ Bioreagents provides clone Bra30 as an HLA-DR Antibody for research into HLA class II biology, antigen presentation and immune-cell recognition. HLA-DR-mediated peptide presentation provides a critical molecular interface between antigen-presenting cells and helper T cells and contributes to the initiation and regulation of adaptive immunity. An MHC Class II Antibody recognizing HLA-DR can support investigation of antigen presentation, immune-cell phenotypes and mechanisms regulating cellular immune responses.

For additional information on HLA-DR biology and complementary antibody validation, visit our HLA-DR Antibody LN3 / MHC Class II Antibody page.

Application Notes

Optimal dilution of the HLA-DR Antibody Bra30 / MHC Class II Antibody should be determined by the researcher.

Immunogen

Human REH cells (a non-T, non-B leukemia cell line) were used as the immunogen for the HLA-DR Antibody Bra30.

Storage

Store the HLA-DR Antibody Bra30 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

HLA-DR antibody, MHC Class II antibody, Bra30 antibody, HLA-DR antigen antibody, Human Leukocyte Antigen DR antibody

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