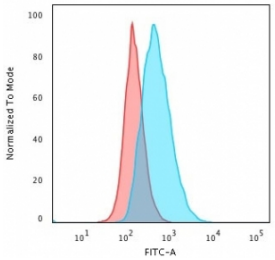
HLA-DQ Antibody SPV-L3 / MHC Class II Antibody [clone SPV-L3] (V2581)

Catalog No.	Formulation	Size
V2581-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2581-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2581SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

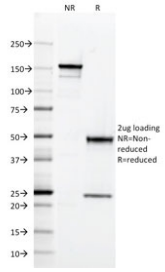
Citations (10)

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	SPV-L3
Purity	Protein G affinity chromatography
UniProt	P01908, P01909, P01920
Localization	Cell surface
Applications	Flow Cytometry : 1-2ug/million cells Immunofluorescence : 1-2ug/ml
Limitations	This HLA-DQ Antibody SPV-L3 / MHC Class II Antibody is available for research use only.



HLA-DQ Antibody SPV-L3 in Human Raji B Lymphoma Cells FACS. Flow cytometry testing of human Raji B lymphoma cells with HLA-DQ Antibody SPV-L3 / MHC Class II Antibody. The antibody-stained population (blue) shows a clear fluorescence shift relative to the isotype control (red), demonstrating detection of cell-surface HLA-DQ.



Purified HLA-DQ Antibody SPV-L3 SDS-PAGE. Electrophoretic analysis of purified, BSA-free HLA-DQ Antibody SPV-L3 / MHC Class II Antibody under non-reducing (NR) and reducing (R) conditions using a 2 ug antibody load. The non-reduced antibody migrates predominantly near ~150 kDa, while reduction produces immunoglobulin heavy and light chain components near ~50 kDa and ~25 kDa, respectively, supporting the integrity and purity of the antibody preparation.

Description

HLA-DQ Antibody SPV-L3 / MHC Class II Antibody recognizes human HLA-DQ, a classical major histocompatibility complex (MHC) class II molecule that functions in antigen presentation to CD4-positive T lymphocytes. HLA-DQ contributes to adaptive immune recognition by displaying processed antigenic peptides at the cell surface, where peptide-MHC complexes can be surveyed by T cell receptors. Recognition of an appropriate complex promotes helper T cell activation and contributes to the coordination of cellular and humoral immune responses.

HLA-DQ is a heterodimer composed of an alpha chain encoded principally by HLA-DQA1 and a beta chain encoded by HLA-DQB1. Both chains contribute to formation of the extracellular peptide-binding groove. Extensive polymorphism within HLA-DQ influences the repertoire of peptides that can be presented and contributes to differences in immune recognition among individuals. Particular HLA-DQ alleles and haplotypes have been associated with susceptibility or resistance to multiple immune-mediated diseases, making HLA-DQ an important focus in immunogenetics and autoimmune disease research.

HLA-DQ is expressed predominantly by professional antigen-presenting cells, including B lymphocytes, dendritic cells and macrophages. Expression can also be induced or enhanced in additional cell types in response to inflammatory signaling. Antigens internalized by antigen-presenting cells are processed primarily within endosomal compartments, where resulting peptides can be loaded onto MHC class II molecules before peptide-HLA complexes are transported to the plasma membrane for CD4 T cell recognition.

HLA-DQ Antibody reagents are useful for investigating MHC class II expression, antigen-presenting cell populations and HLA-DQ-dependent immune recognition. HLA-DQ biology is particularly relevant to studies of autoimmunity, infectious disease, transplantation, inflammation and adaptive immune regulation. Antibodies directed against HLA-DQ also complement reagents targeting HLA-DP and HLA-DR, allowing researchers to distinguish individual components of the classical MHC class II system from broader pan-HLA class II expression.

Clone SPV-L3 is an established mouse monoclonal antibody directed against human HLA-DQ and has been extensively used in published research. NSJ Bioreagents provides this HLA-DQ Antibody for studies of MHC class II biology, antigen presentation and immune-cell recognition. An MHC Class II Antibody targeting HLA-DQ can support investigation of HLA-DQ-positive cell populations and mechanisms connecting peptide presentation with CD4 T cell-mediated immunity.

Explore our Immunology Antibodies page for additional reagents targeting MHC molecules, antigen presentation and adaptive immune responses.

Application Notes

Optimal dilution of the HLA-DQ Antibody SPV-L3 / MHC Class II Antibody should be determined by the researcher.

Immunogen

The T4-positive CTL clone HG-38 was used as the immunogen for the HLA-DQ Antibody SPV-L3.

Storage

Store the HLA-DQ Antibody SPV-L3 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

HLA-DQ antibody, MHC Class II antibody, HLA Class II DQ antibody, HLA-DQ MHC II antibody, SPV-L3 antibody

Copyright © NSJ Bioreagents. All rights reserved.