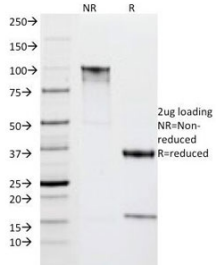
HLA-DR Antibody IPO-10 / B Cell Marker Antibody [clone IPO-10] (V2583)

Catalog No.	Formulation	Size
V2583-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2583-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2583SAF-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 IgG3, kappa
Clone Name	IPO-10
Purity	Protein G affinity chromatography
UniProt	P01903
Localization	Cell surface
Applications	Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml
Limitations	This HLA-DR Antibody IPO-10 / B Cell Marker Antibody is available for research use only.



Purified HLA-DR Antibody IPO-10 SDS-PAGE. Electrophoretic analysis of 2 ug of purified HLA-DR Antibody clone IPO-10 under non-reducing (NR) and reducing (R) conditions. The non-reduced sample shows the intact antibody, while reduction resolves the antibody into its immunoglobulin heavy and light chains. The observed banding pattern supports the integrity and purity of the purified IPO-10 monoclonal antibody.

Description

HLA-DR Antibody IPO-10 / B Cell Marker Antibody recognizes HLA-DR, a major histocompatibility complex (MHC) class II molecule involved 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. The assembled complex binds antigen-derived peptides and presents them to CD4-positive T cells, helping coordinate interactions between antigen-presenting cells and the adaptive immune system.

HLA-DR is prominently expressed by professional antigen-presenting cells, including B cells, monocytes, macrophages and dendritic cells. Its expression can also change with cellular activation and differentiation, making HLA-DR an important marker in studies of immune-cell phenotype and function. B lymphocytes express HLA class II molecules as part of their antigen-presenting machinery, allowing B cells to participate directly in antigen-specific CD4 T cell responses in addition to their roles in antibody-mediated immunity.

Clone IPO-10 has a distinctive history in B cell research. The monoclonal antibody was originally developed and characterized as a reagent recognizing a human B-cell differentiation antigen. Early studies examined IPO-10 reactivity across human cell lines and normal and neoplastic lymphoid populations, reporting recognition of B-lineage cells at multiple stages of differentiation. IPO-10 was subsequently investigated in the immunophenotypic characterization of leukemias and lymphomas. This established research history gives clone IPO-10 particular relevance to studies connecting HLA-DR expression with B cell differentiation and lymphoid immunophenotyping.

NSJ Bioreagents provides clone IPO-10 as an HLA-DR Antibody for research into HLA class II biology, B lymphocytes and immune-cell phenotypes. Modern characterization assigns IPO-10 to HLA-DRA, the alpha-chain component of the HLA-DR complex. The historical association of this clone with B-cell differentiation provides useful additional context for researchers investigating HLA-DR-positive lymphoid populations. A B Cell Marker Antibody such as IPO-10 can complement other immunophenotyping reagents in studies of B cell biology, antigen presentation and lymphoid differentiation.

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 IPO-10 / B Cell Marker Antibody should be determined by the researcher.

Immunogen

Spleen cells from a patient with hairy cell leukemia were used as the immunogen for the HLA-DR Antibody IPO-10.

Storage

Store the HLA-DR Antibody IPO-10 at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

HLA-DR antibody, IPO-10 antibody, B Cell Marker antibody, HLA-DRA antibody, MHC Class II antibody

Copyright © NSJ Bioreagents. All rights reserved.