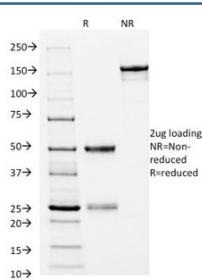


HLA-DRB1 Antibody (MHC II) [clone L243] (V2591)

Catalog No.	Formulation	Size
V2591-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2591-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2591SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

 [Citations \(11\)](#)
[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	L243
Purity	Protein G affinity chromatography
UniProt	P01911
Localization	Cell surface
Applications	Flow Cytometry : 0.5-1ug/10 ⁶ cells Immunofluorescence : 0.5-1ug/ml
Limitations	This HLA-DRB1 antibody is available for research use only.



SDS-PAGE Analysis of Purified, BSA-Free HLA-DRB1 Antibody (clone L243).
Confirmation of Integrity and Purity of the Antibody.

Description

HLA-DRB1 antibody clone L243 is a monoclonal antibody that recognizes HLA-DRB1, a beta chain of class II MHC molecules responsible for presenting peptides to CD4 positive T cells. This interaction initiates adaptive immune responses, shaping host defense and immune regulation. NSJ Bioreagents provides HLA-DRB1 antibody clone L243 for use in immunology, cancer research, and transplantation biology.

The antibody produces strong staining on B cells, monocytes, dendritic cells, and activated T cells. In immunology, it is widely applied to characterize antigen-presenting cells and to assess immune system activation. Its reproducibility makes it a trusted reagent in both experimental and clinical research settings.

In transplantation, HLA-DRB1 antibody clone L243 is valuable for evaluating histocompatibility. Differences in HLA-DRB1 alleles strongly influence graft acceptance and rejection, and this antibody supports research aimed at improving transplant outcomes.

In oncology, the antibody has been employed to investigate how tumors evade immune surveillance. Loss or reduction of HLA-DR expression impairs CD4 positive T cell recognition, and detection with clone L243 helps clarify immune escape pathways. It has been particularly useful in studies of lymphomas and solid tumors with altered HLA-DRB1 expression.

The antibody is also relevant to autoimmune disease research. Specific HLA-DRB1 alleles are associated with increased susceptibility to autoimmune conditions, and clone L243 has been used to track HLA class II expression in diseased tissues.

Validated across tissue and cell-based applications, the antibody consistently provides strong and specific staining. Alternate names include HLA class II DR beta chain antibody, MHC class II DRB1 antibody, and HLA-DR antigen antibody.

This mAb reacts with the HLA-DRB1 antigen, a member of MHC class II molecules. It does not cross react with HLA-DP and HLA-DQ. It binds a conformational epitope on HLA-DR, which depends on the correct folding of the alpha/beta heterodimer. This mAb has been reported to block mixed lymphocyte reactions. The L243 antibody recognizes a different epitope than the LN3 monoclonal antibody, and these antibodies do not cross-block binding to each other's respective epitopes.

Application Notes

Optimal dilution of the HLA-DRB1 antibody should be determined by the researcher.

Immunogen

Activated human peripheral blood mononuclear cells were used as the immunogen for the HLA-DRB1 antibody.

Storage

Store the HLA-DRB1 antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).

