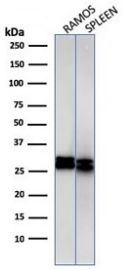
HLA-DRB1 Antibody (MHC II) [clone HLA-DRB/1067] (V2590)

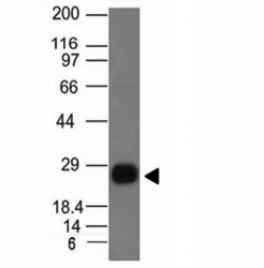
Catalog No.	Formulation	Size
V2590-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2590-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2590SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2590IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

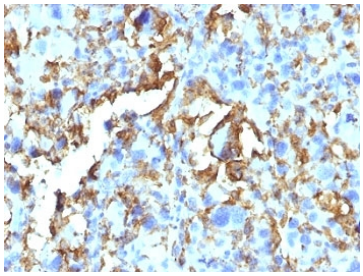
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	HLA-DRB/1067
Purity	Protein G affinity chromatography
UniProt	P01911
Localization	Cell surface
Applications	Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 2-4ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 0.25-0.5ug/ml for 30 min at RT
Limitations	This HLA-DRB1 antibody is available for research use only.



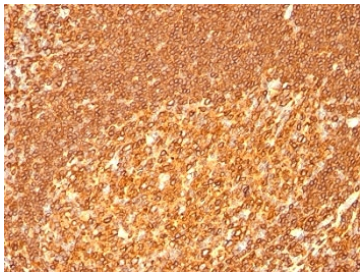
Western blot Anaysis of human 1) Ramos and 2) spleen cell Lyste using HLA-DRB1 antibody (clone HLA-DRB/1067). Predicted molecular weight ~30 kDa.



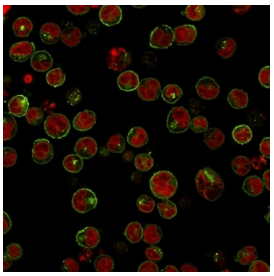
Western blot Anaysis of Ramos cell Lyste using HLA-DRB1 antibody (HLA-DRB/1067). Predicted molecular weight ~30 kDa.



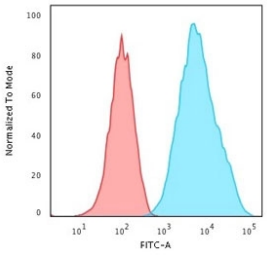
IHC: Formalin-fixed, paraffin-embedded human Histiocytoma stained with HLA-DRB antibody (clone HLA-DRB/1067).



IHC: Formalin-fixed, paraffin-embedded human tonsil stained with HLA-DRB antibody (clone HLA-DRB/1067).



Immunofluorescent staining of Raji cells with HLA-DRB1 antibody (green, clone HLA-DRB/1067) and Reddot nuclear stain (red).



FACS staining of Raji cells with HLA-DRB1 antibody (clone HLA-DRB/1067); Red=isotype control, Blue= HLA-DRB1 antibody.

Description

HLA-DRB1 antibody clone HLA-DRB/1067 is a monoclonal antibody specific for HLA-DRB1, a critical component of class II major histocompatibility complex molecules. These heterodimeric proteins present peptides from extracellular antigens to CD4 positive T lymphocytes, initiating adaptive immune responses. NSJ Bioreagents offers HLA-DRB1 antibody clone HLA-DRB/1067 to support research in immunology, transplantation, oncology, and autoimmunity.

The antibody shows robust membranous staining on B lymphocytes, dendritic cells, and macrophages. Its specificity makes it a reliable tool for identifying antigen-presenting cells in human tissues. In immunology, it is frequently applied to

evaluate immune activation and to study how HLA class II expression shapes T cell responses.

In transplantation research, the antibody contributes to understanding compatibility and rejection risk. Because HLA-DRB1 variation is a major determinant of transplant success, detection of its expression is vital for donor-recipient evaluation.

In cancer studies, researchers use this antibody to investigate immune evasion strategies. Many malignancies downregulate HLA-DR expression, impairing recognition by helper T cells. Detection with this antibody supports studies into tumor immunology and therapeutic targeting of immune pathways.

Autoimmune diseases also have strong links to HLA-DRB1 alleles. Clone HLA-DRB/1067 has been applied in studies of rheumatoid arthritis and multiple sclerosis, where altered HLA-DRB1 expression contributes to disease progression.

Technically validated in cell-based and tissue-based applications, the antibody provides consistent and specific staining. Alternate names include MHC class II beta chain antibody, HLA-DRB class II antigen antibody, and HLA class II DR beta chain antibody.

This mAb reacts with the beta-chain of HLA-DRB1 antigen, a member of MHC class II molecules. It does not cross react with HLA-DP and HLA-DQ. Its epitope is different from that of mAb L243.

Application Notes

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

1. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 min
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

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

Storage

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