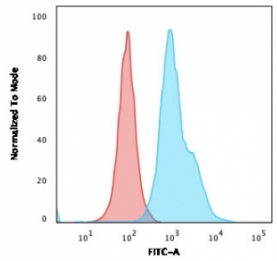
Anti-HLA-DRB1 Antibody (MHC II) [clone SPM423] (V2589)

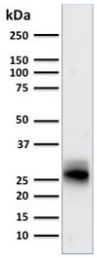
Catalog No.	Formulation	Size
V2589-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2589-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2589SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2589IHC-7ML	Prediluted 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

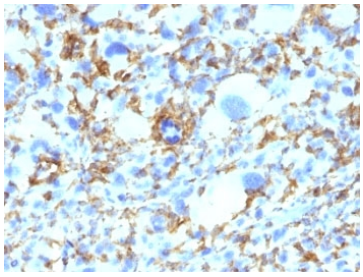
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	SPM423
Purity	Protein G affinity chromatography
UniProt	P01911
Localization	Cell surface
Applications	Flow Cytometry : 1-2ug/10^6 cells Immunofluorescence : 1-2ug/ml Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 0.25-0.5ug/ml for 30 min at RT
Limitations	This anti-HLA-DRB1 antibody is available for research use only.



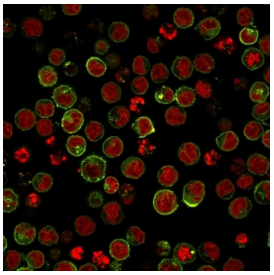
Flow cytometry testing of human Raji cells with anti-HLA-DRB1 antibody (clone SPM423); Red=isotype control, Blue= anti-HLA-DRB1 antibody.



Western blot testing of human spleen lysate with anti-HLA-DRB1 antibody (clone SPM423). Predicted molecular weight ~30 kDa.



Formalin-fixed, paraffin-embedded human Histiocytoma stained with anti-HLA-DRB1 antibody (clone SPM423).



Immunofluorescent staining of human Raji cells with anti-HLA-DRB1 antibody (clone SPM423, green) and Reddot nuclear stain (red).

Description

This mAb reacts with a 28kDa chain of HLA-DRB1 antigen, a member of MHC class II molecules. It does not cross react with HLA-DP and HLA-DQ. HLA-DR is a heterodimeric cell surface glycoprotein comprised of a 36kDa alpha (heavy) chain and a 28kDa beta (light) chain. It is expressed on B-cells, activated T-cells, monocytes/macrophages, dendritic cells and other non-professional APCs. In conjunction with the CD3/TCR complex and CD4 molecules, HLA-DR is critical for efficient peptide presentation to CD4+ T cells. It is an excellent histiocytic marker in paraffin sections producing intense staining. True histiocytic neoplasms are similarly positive. HLA-DR antigens also occur on a variety of epithelial cells and their corresponding neoplastic counterparts. Loss of HLA-DR expression is related to tumor microenvironment and predicts adverse outcome in diffuse large B-cell lymphoma.

Application Notes

Optimal dilution of the anti-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 anti-HLA-DRB1 antibody.

Storage

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