

## HLA-DRB1 Antibody Clone Bra30 / HLA-DRB1 Monoclonal Antibody [clone Bra30] (V7844)

Catalog No.	Formulation	Size
V7844-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7844-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7844SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

### Bulk quote request

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG2a, kappa
<b>Clone Name</b>	Bra30
<b>Purity</b>	Protein G affinity chromatography
<b>UniProt</b>	P01911
<b>Applications</b>	Flow Cytometry : 1-2ug/10 <sup>6</sup> cells
<b>Limitations</b>	This HLA-DRB1 antibody is available for research use only.



### Description

Major histocompatibility complex class II DR beta 1 (HLA-DRB1) is a transmembrane glycoprotein encoded by the HLA-

DRB1 gene that forms the beta chain of the HLA-DR antigen receptor responsible for presenting processed peptide antigens to CD4-positive helper T lymphocytes. HLA-DRB1 Antibody Clone Bra30 recognizes the HLA-DR beta chain and has been widely referenced in the literature as Clone Bra30, a mouse monoclonal antibody commonly used to study MHC class II antigen presentation and immune cell activation. The HLA-DR receptor is a heterodimeric complex composed of an alpha chain encoded by HLA-DRA paired with a polymorphic beta chain encoded by HLA-DRB genes, most prominently HLA-DRB1. Together these chains form a peptide-binding receptor that displays extracellularly derived antigens on the cell surface for recognition by CD4-positive T lymphocytes. This antigen presentation pathway is central to adaptive immune responses and immune regulation.

Expression of HLA-DR molecules is characteristic of professional antigen-presenting cells including B lymphocytes, macrophages, dendritic cells, and activated monocytes. Because of this expression pattern, HLA-DRB1 antibodies are widely used in immunology research to identify antigen-presenting immune cell populations and to evaluate immune activation states within tissues and cultured cells. Detection of HLA-DR beta chain expression is particularly useful in studies examining lymphoid tissues, immune cell differentiation, and tumor-associated immune infiltration. Clone Bra30 has been reported in peer-reviewed publications investigating the distribution and function of MHC class II molecules on immune cells. In these studies, HLA-DRB1 Antibody Clone Bra30 has been used to examine antigen-presenting cell populations and the regulation of immune responses mediated through the HLA-DR pathway.

The HLA-DRB1 gene exhibits extensive allelic diversity across human populations, contributing to variability in peptide binding specificity and immune responsiveness. Certain HLA-DRB1 variants have been associated with susceptibility to autoimmune diseases and immune-mediated disorders including rheumatoid arthritis, multiple sclerosis, and type 1 diabetes. Because of these biological roles, antibodies such as HLA-DRB1 Antibody Clone Bra30 are valuable tools for investigating antigen presentation pathways, immune activation, and immune regulation in immunology and disease-related research.

## Application Notes

Optimal dilution of the HLA-DRB1 Antibody Clone Bra30 should be determined by the researcher.

## Immunogen

Human REH cells (a non-T, non-B leukemia cell line) 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).

## Alternate Names

HLA-DR beta antibody, HLA-DRB1 antibody, MHC class II DR beta antibody, HLA class II histocompatibility antigen DR beta antibody