



## 2B1F Monoclonal Antibody

<b>Catalog No</b>	YP-mAb-05639
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB
<b>Gene Name</b>	HLA-DRB1 HLA-DRB2
<b>Protein Name</b>	HLA class II histocompatibility antigen, DRB1-15 beta chain (DW2.2/DR2.2) (MHC class II antigen DRB1*15)
<b>Immunogen</b>	Synthesized peptide derived from part region of human protein AA range: 181-230
<b>Specificity</b>	2B1F Monoclonal Antibody detects endogenous levels of protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse,IgG
<b>Purification</b>	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB 1:500-1:2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	
<b>Observed Band</b>	29kD
<b>Cell Pathway</b>	Cell membrane ; Single-pass type I membrane protein . Endoplasmic reticulum membrane ; Single-pass type I membrane protein . Lysosome membrane ; Single-pass type I membrane protein . Late endosome membrane ; Single-pass type I membrane protein . Autolysosome membrane . The MHC class II complex transits through a number of intracellular compartments in the endocytic pathway until it reaches the cell membrane for antigen presentation (PubMed:18305173). Component of immunological synapses at the interface between T cell and APC (PubMed:29884618). .
<b>Tissue Specificity</b>	Expressed in professional APCs: monocyte/macrophages, dendritic cells and B cells (at protein level) (PubMed:31495665, PubMed:23783831, PubMed:19830726). Expressed in thymic epithelial cells (at protein level) (PubMed:23783831).
<b>Function</b>	disease:Allelic variation at the HLA-DRB1 locus is a major contributor to genetic predisposition for sarcoidosis [MIM:181000]. Sarcoidosis is a disease of unknown aetiology in which there are chronic inflammatory granulomatous lesions in lymph nodes and other organs..polymorphism:The following alleles of DRB1-1 are known: DRB1*0101, DRB1*0102, DRB1*0103, DRB1*0104, DRB1*0105, DRB1*0106 and DRB1*0107. The sequence shown is that of



DRB1\*0101.,polymorphism:The following alleles of DRB1-11 are known: DRB1\*1101, DRB1\*1103 and DRB1\*1104. The sequence shown is that of DRB1\*1101. Allele DRB1\*1101 is associated with self-limiting hepatitis C virus (HCV) infections [MIM:609532].,polymorphism:The following alleles of DRB1-4 are known: DRB1\*0401, DRB1\*0402, DRB1\*0403, DRB1\*0404 and DRB1\*0411. The sequence shown is that of DRB1\*0401.,polymorphism:The following alleles of DRB1-8 are known: DRB1\*0801 (

#### Background

major histocompatibility complex, class II, DR beta 1(HLA-DRB1) Homo sapiens HLA-DRB1 belongs to the HLA class II beta chain paralogs. The class II molecule is a heterodimer consisting of an alpha (DRA) and a beta chain (DRB), both anchored in the membrane. It plays a central role in the immune system by presenting peptides derived from extracellular proteins. Class II molecules are expressed in antigen presenting cells (APC: B lymphocytes, dendritic cells, macrophages). The beta chain is approximately 26-28 kDa. It is encoded by 6 exons. Exon one encodes the leader peptide; exons 2 and 3 encode the two extracellular domains; exon 4 encodes the transmembrane domain; and exon 5 encodes the cytoplasmic tail. Within the DR molecule the beta chain contains all the polymorphisms specifying the peptide binding specificities. Hundreds of DRB1 alleles have been described and typing for these polymorphisms is routinely done for bone marrow and kidney t

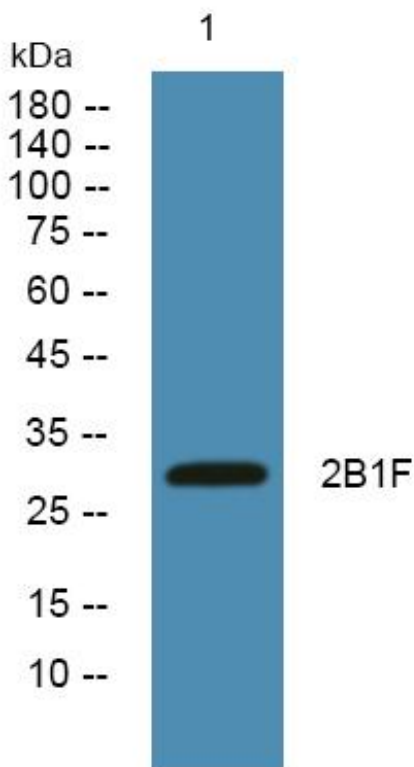
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western Blot analysis of various cells using 2B1F Monoclonal Antibody