Nature Biosciences

HLA Class II DRB1 Rabbit mAb [8FM7]

Cat NO. :A57822

Information:

Applications	Reactivity:	UniProt ID:	MW(kDa)	Host	Isotype	Size
WB,IHC,ICC/IF	H	P01911	29 kDa	Rabbit	IgG	100ul,200ul

Applications detail：

Application	Dilution
WB	1:1000-2000
IHC	1:100,
ICC/IF	1:100,
The optimal dilutions should be determined by the end user	

Conjugate：

UnConjugate

Form：

Liquid

sensitivity：

Endogenous

Purification：

Protein A purification

Specificity：

Antibody is produced by immunizing animals with a synthetic peptide of Human HLA Class II DRB1.

Storage buffer and conditions：

Antibody store in 10 mM PBS, 0.5mg/ml BSA, 50% glycerol（buffer）.

Shipped at 4℃. Store at-20℃ or -80℃.

Products are valid for one natural year of receipt.Avoid repeated freeze / thaw cycles.

Tissue specificity：

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

Subcellular location:

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

Function：

For Research Use Only. Not For Use In Diagnostic Procedures.

A beta chain of antigen-presenting major histocompatibility complex class II (MHCII) molecule. In complex with the alpha chain HLA-DRA, displays antigenic peptides on professional antigen presenting cells (APCs) for recognition by alpha-beta T cell receptor (TCR) on HLA-DRB1-restricted CD4-positive T cells. This guides antigen-specific T-helper effector functions, both antibody-mediated immune response and macrophage activation, to ultimately eliminate the infectious agents and transformed cells (PubMed:29884618, PubMed:22327072, PubMed:27591323, PubMed:8642306, PubMed:15265931, PubMed:31495665, PubMed:16148104). Typically presents extracellular peptide antigens of 10 to 30 amino acids that arise from proteolysis of endocytosed antigens in lysosomes (PubMed:8145819). In the tumor microenvironment, presents antigenic peptides that are primarily generated in tumor-resident APCs likely via phagocytosis of apoptotic tumor cells or macropinocytosis of secreted tumor proteins (PubMed:31495665). Presents peptides derived from intracellular proteins that are trapped in autolysosomes after macroautophagy, a mechanism especially relevant for T cell selection in the thymus and central immune tolerance (PubMed:17182262, PubMed:23783831). The selection of the immunodominant epitopes follows two processing modes: 'bind first, cut/trim later' for pathogen-derived antigenic peptides and 'cut first, bind later' for autoantigens/self-peptides (PubMed:25413013). The anchor residue at position 1 of the peptide N-terminus, usually a large hydrophobic residue, is essential for high affinity interaction with MHCII molecules (PubMed:8145819).., Allele DRB1*01:01: Displays an immunodominant epitope derived from Bacillus anthracis pagA/protective antigen, PA (KLPLYISNPNYKVNVYAVT), to both naive and PA-specific memory CD4-positive T cells (PubMed:22327072). Presents immunodominant HIV-1 gag peptide (FRDYVDRFYKTLRAEQASQE) on infected dendritic cells for recognition by TRAV24-TRBV2 TCR on CD4-positive T cells and controls viral load (PubMed:29884618). May present to T-helper 1 cells several HRV-16 epitopes derived from capsid proteins VP1 (PRFSLPFLSIASAYYMFYDG) and VP2 (PHQFINLRSNNSATLIVPYV), contributing to viral clearance (PubMed:27591323). Displays commonly recognized peptides derived from IAV external protein HA (PKYVKQNTLKLAT and SNGNFIAPEYAYKIVK) and from internal proteins M, NP and PB1, with M-derived epitope (GLIYNRMGAVTTEV) being the most immunogenic (PubMed:8145819, PubMed:9075930, PubMed:25413013, PubMed:32668259). Presents a self-peptide derived from COL4A3 (GWISLWKGFSF) to TCR (TRAV14 biased) on CD4-positive, FOXP3-positive regulatory T cells and mediates immune tolerance to self (PubMed:28467828). May present peptides derived from oncofetal trophoblast glycoprotein TPBG 5T4, known to be recognized by both T-helper 1 and regulatory T cells (PubMed:31619516). Displays with low affinity a self-peptide derived from MBP (VHFFKNIVTPRTP) (PubMed:9075930).., Allele

Validation Data：

HLA Class II DRB1 Rabbit mAb [8FM7]   Images
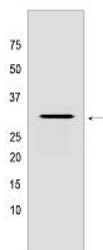
Western blot (SDS PAGE) analysis of extracts from Human spleen tissue lyaste.using HLA Class II DRB1 Rabbit mAb [8FM7] at dilution of 1:1000 incubated at

View more information on http://naturebios.com

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 1% w/v Milk, 1X TBST at 4°C overnight.

For Research Use Only. Not For Use In Diagnostic Procedures.