

Product datasheet for **CF812174**

HLA-DRB5 Mouse Monoclonal Antibody [Clone ID: OTI4G7]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI4G7
Applications:	IHC, WB
Recommended Dilution:	WB 1:500, IHC 1:150
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 30-266 of human HLA-DRB5 (NP_002116) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	30.06 kDa
Gene Name:	major histocompatibility complex, class II, DR beta 5
Database Link:	NP_002116 Entrez Gene 3127 Human Q30154



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Background:

HLA-DRB5 belongs to the HLA class II beta chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DRA) and a beta (DRB) chain, 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 and its gene contains 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. Typing for these polymorphisms is routinely done for bone marrow and kidney transplantation. DRB1 is expressed at a level five times higher than its paralogues DRB3, DRB4 and DRB5. The presence of DRB5 is linked with allelic variants of DRB1, otherwise it is omitted. There are 4 related pseudogenes: DRB2, DRB6, DRB7, DRB8 and DRB9. [provided by RefSeq, Jul 2008]

Synonyms:

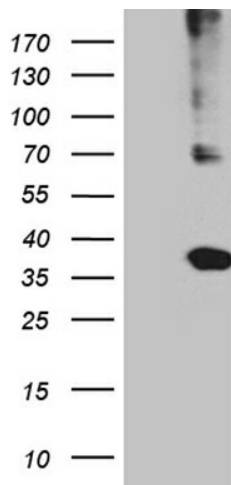
HLA-DRB

Protein Families:

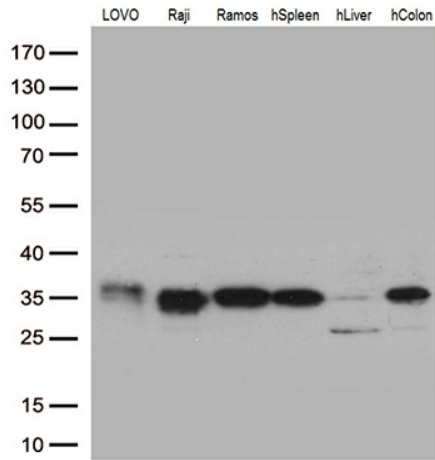
Transmembrane

Protein Pathways:

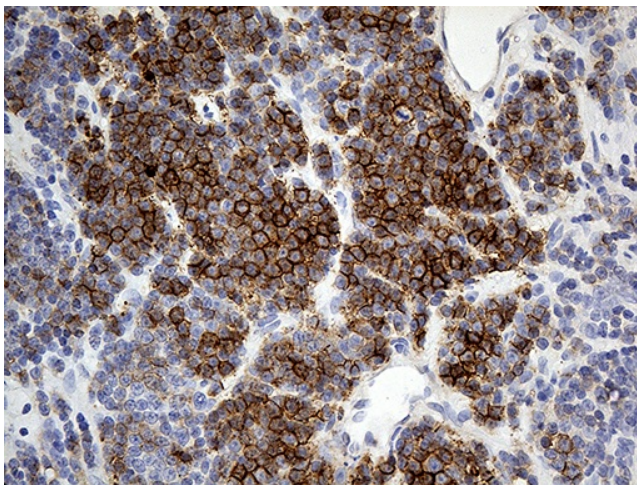
Allograft rejection, Antigen processing and presentation, Asthma, Autoimmune thyroid disease, Cell adhesion molecules (CAMs), Graft-versus-host disease, Hematopoietic cell lineage, Systemic lupus erythematosus, Type I diabetes mellitus, Viral myocarditis

Product images:


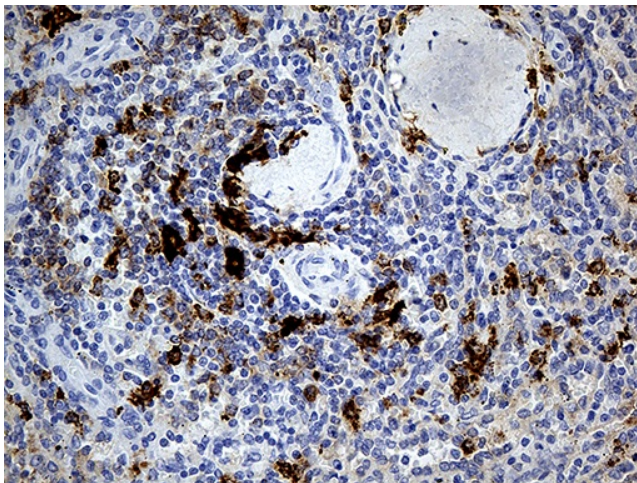
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY HLA (Cat# [RC203646], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-HLA (Cat# [TA812174]). Positive lysates [LY419520] (100ug) and [LC419520] (20ug) can be purchased separately from OriGene.



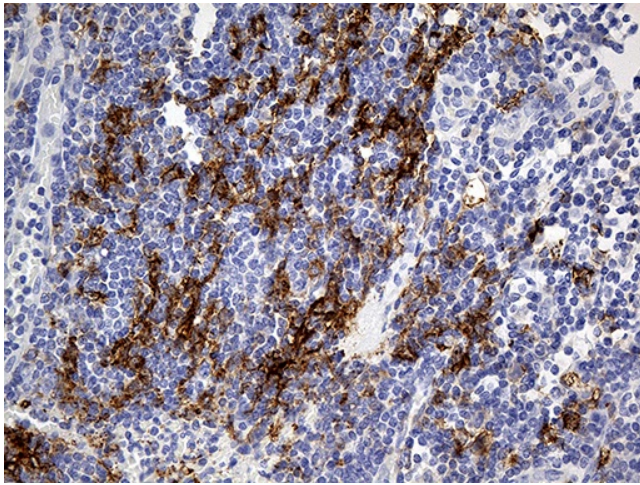
Western blot analysis of extracts (35ug) from 3 cell lines lysates and 3 tissue lysates by using anti-HLA monoclonal antibody (1:500).



Immunohistochemical staining of paraffin-embedded Human lymphoma tissue using anti-HLA mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA812174]) (1:150)



Immunohistochemical staining of paraffin-embedded Human spleen tissue within the normal limits using anti-HLA mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA812174]) (1:150)



Immunohistochemical staining of paraffin-embedded Human appendix tissue within the normal limits using anti-HLA mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris buffer (pH8.5) at 120°C for 3min, [TA812174]) (1:150)