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HLA-DPB1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant HLA-DPB1.
Catalog # AT2377a

Product Information

Application	WB, IHC, IP, E
Primary Accession	P04440
Other Accession	BC013184
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	6C6
Calculated MW	29159

Additional Information

Gene ID	3115
Other Names	HLA class II histocompatibility antigen, DP beta 1 chain, HLA class II histocompatibility antigen, DP(W4) beta chain, MHC class II antigen DPB1, HLA-DPB1, HLA-DP1B
Target/Specificity	HLA-DPB1 (AAH13184, 1 a.a. ~ 258 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IP~~N/A E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	HLA-DPB1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

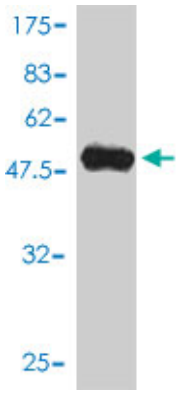
Background

HLA-DPB belongs to the HLA class II beta chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DPA) and a beta chain (DPB), 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 DP molecule both the alpha chain and the beta chain contain the polymorphisms specifying the peptide binding specificities, resulting in up to 4 different molecules.

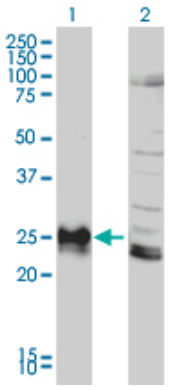
References

Extended LTA, TNF, LST1 and HLA gene haplotypes and their association with rubella vaccine-induced immunity. Ovsyannikova IG, et al. PLoS One, 2010 Jul 27. PMID 20668555.Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.HLA genotyping in the international Type 1 Diabetes Genetics Consortium. Mychaleckyj JC, et al. Clin Trials, 2010. PMID 20595243.Anthropological analysis of Koreans using HLA class II diversity among East Asians. Yang JH, et al. Tissue Antigens, 2010 May 26. PMID 20522202.[Association of regulatory region of HLA-DPB1 with nasopharyngeal carcinoma in southern Chinese Hans] Wang P, et al. Lin Chung Er Bi Yan Hou Tou Jing Wai Ke Za Zhi, 2010 Mar. PMID 20518290.

Images

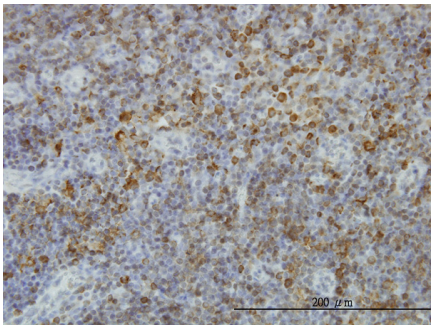


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (54.12 KDa) .



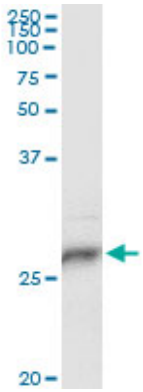
Western Blot analysis of HLA-DPB1 expression in transfected 293T cell line by HLA-DPB1 monoclonal antibody (M01), clone 6C6.

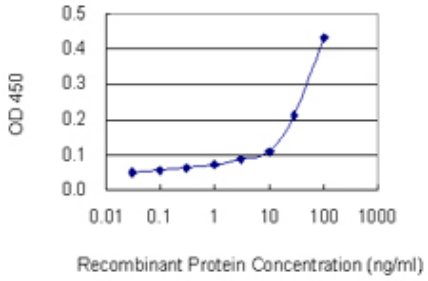
Lane 1: HLA-DPB1 transfected lysate(29 KDa).
Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to HLA-DPB1 on formalin-fixed paraffin-embedded human lymph node. [antibody concentration 0.5 ug/ml]

Immunoprecipitation of HLA-DPB1 transfected lysate using anti-HLA-DPB1 monoclonal antibody and Protein A Magnetic Bead (U0007), and immunoblotted with HLA-DPB1 monoclonal antibody.





Detection limit for recombinant GST tagged HLA-DPB1 is 10 ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.