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# HLA-DPA1 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a full-length recombinant HLA-DPA1.
Catalog # AT2376a

## Product Information

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|---|---|
| **Application** | WB, E |
| **Primary Accession** | P20036 |
| **Other Accession** | BC009956 |
| **Reactivity** | Human |
| **Host** | mouse |
| **Clonality** | monoclonal |
| **Isotype** | IgG2a Kappa |
| **Clone Names** | 1E4 |
| **Calculated MW** | 29381 |

## Additional Information

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|---|---|
| **Gene ID** | 3113 |
| **Other Names** | HLA class II histocompatibility antigen, DP alpha 1 chain, DP(W3), DP(W4), HLA-SB alpha chain, MHC class II DP3-alpha, MHC class II DPA1, HLA-DPA1, HLA-DP1A, HLASB |
| **Target/Specificity** | HLA-DPA1 (AAH09956, 1 a.a. ~ 260 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. |
| **Dilution** | WB~~1:500~1000 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-DPA1 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures. |

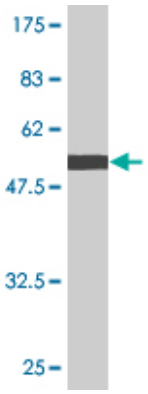
## Background

HLA-DPA1 belongs to the HLA class II alpha chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DPA) and a beta (DPB) 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 alpha chain is approximately 33-35 kDa and its gene contains 5 exons. Exon one encodes the leader peptide, exons 2 and 3 encode the two extracellular domains, exon 4 encodes the transmembrane domain and 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.

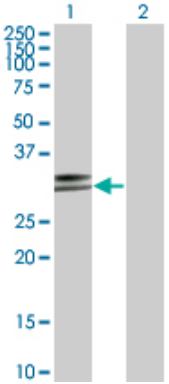
## References

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.HLA Class I and II profiles in S?o Miguel Island (Azores): genetic diversity and linkage disequilibrium. Pacheco PR, et al. BMC Res Notes, 2010 May 12. PMID 20462405.HLA DPA1, DPB1 alleles and haplotypes contribute to the risk associated with type 1 diabetes: analysis of the type 1 diabetes genetics consortium families. Varney MD, et al. Diabetes, 2010 Aug. PMID 20424227.

## Images

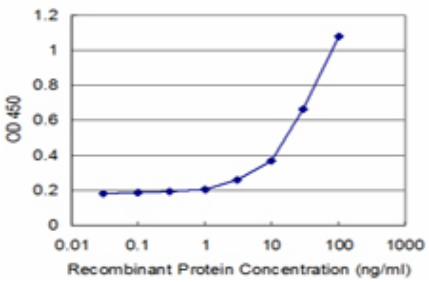



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (54.34 KDa) .




Western Blot analysis of HLA-DPA1 expression in transfected 293T cell line by HLA-DPA1 monoclonal antibody (M03), clone 1E3.

Lane 1: HLA-DPA1 transfected lysate(29.3 KDa).
Lane 2: Non-transfected lysate.




Detection limit for recombinant GST tagged HLA-DPA1 is approximately 3ng/ml as a capture antibody.

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