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HLA-DRB4 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant HLA-DRB4.
Catalog # AT2378a

Product Information

Application	WB, IHC, E
Primary Accession	P13762
Other Accession	BC005312
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	4C8
Calculated MW	29941

Additional Information

Gene ID	3126
Other Names	HLA class II histocompatibility antigen, DR beta 4 chain, MHC class II antigen DRB4, HLA-DRB4
Target/Specificity	HLA-DRB4 (AAH05312, 30 a.a. ~ 266 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 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-DRB4 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

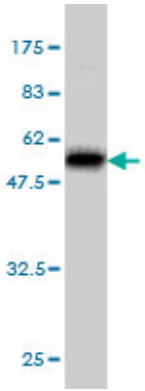
HLA-DRB4 belongs to the HLA class II beta chain paralogues. This class II molecule is a heterodimer consisting of an alpha (DRA) and a beta (DRB) chain, both anchored in the membrane. It plays a central role in the immune system by presenting peptides derived from extracellular proteins. Class II molecules 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 DRB4 is linked with allelic variants of DRB1, otherwise it is omitted. There are 4 related

pseudogenes: DRB2, DRB6, DRB7, DRB8 and DRB9.

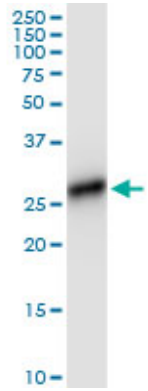
References

Visual hallucinations and HLA class II antigens in cortical dementia. G?mez-Tortosa E, et al. Dement Geriatr Cogn Disord, 2010. PMID 20606439.HLA-DR genotypes influence age at disease onset in children and juveniles with type 1 diabetes mellitus. Awa WL, et al. Eur J Endocrinol, 2010 Jul. PMID 20371654.The impact of anti-HY responses on outcome in current and subsequent pregnancies of patients with recurrent pregnancy losses. Christiansen OB, et al. J Reprod Immunol, 2010 May. PMID 20307907.[Association of hemorrhagic fever with renal syndrome and HLA-DRB allele polymorphisms in Han nationality, Hubei province.] Wei B, et al. Zhonghua Liu Xing Bing Xue Za Zhi, 2009 Nov. PMID 20193583.HLA-DR association in papillary thyroid carcinoma. Amoli MM, et al. Dis Markers, 2010 Jan. PMID 20164547.

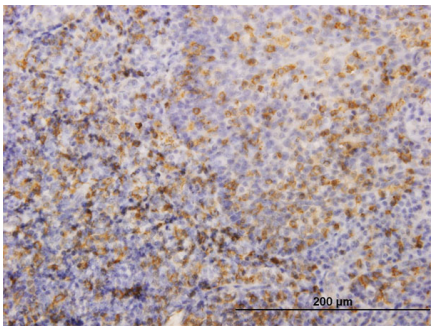
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (51.81 KDa) .

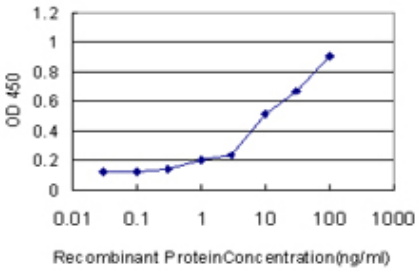


HLA-DRB4 monoclonal antibody (M01), clone 4C8.
Western Blot analysis of HLA-DRB4 expression in human kidney.



Immunoperoxidase of monoclonal antibody to HLA-DRB4 on formalin-fixed paraffin-embedded human tonsil. [antibody concentration 1 ug/ml]

Detection limit for recombinant GST tagged HLA-DRB4 is approximately 1ng/ml as a capture antibody.



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