

HLA-DRB4 Antibody (monoclonal) (M01)

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

Specification

HLA-DRB4 Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW

WB, IHC, E <u>P13762</u> <u>BC005312</u> Human Mouse Monoclonal IgG2b Kappa 29941

HLA-DRB4 Antibody (monoclonal) (M01) - 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.

HLA-DRB4 Antibody (monoclonal) (M01) - Protocols

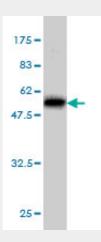
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides

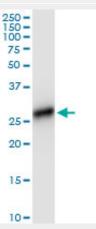


- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

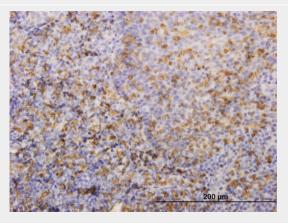
HLA-DRB4 Antibody (monoclonal) (M01) - Images



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

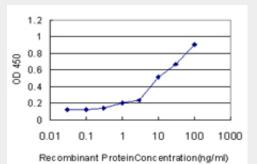


HLA-DRB4 monoclonal antibody (M01), clone 4C8. Western Blot analysis of HLA-DRB4 expression in human kidney.





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.

HLA-DRB4 Antibody (monoclonal) (M01) - 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.

HLA-DRB4 Antibody (monoclonal) (M01) - 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.