Datasheet for ABIN7155590

# anti-HLA-DQA1 antibody (AA 24-213) (Biotin)

1 Image

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## Overview

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|---|---|
| Quantity: | 100 µg |
| Target: | HLA-DQA1 |
| Binding Specificity: | AA 24-213 |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This HLA-DQA1 antibody is conjugated to Biotin |
| Application: | ELISA, Immunohistochemistry (IHC) |

## Product Details

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|---|---|
| Immunogen: | Recombinant Human HLA class II histocompatibility antigen, DQ alpha 1 chain protein (24-213AA) |
| Isotype: | IgG |
| Cross-Reactivity: | Human |
| Purification: | >95%, Protein G purified |

## Target Details

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|---|---|
| Target: | HLA-DQA1 |
| Alternative Name: | HLA-DQA1 (HLA-DQA1 Products) |
| Background: | Background: Binds peptides derived from antigens that access the endocytic route of antigen |

presenting cells (APC) and presents them on the cell surface for recognition by the CD4 T-cells. The peptide binding cleft accommodates peptides of 10-30 residues. The peptides presented by MHC class II molecules are generated mostly by degradation of proteins that access the endocytic route, where they are processed by lysosomal proteases and other hydrolases. Exogenous antigens that have been endocytosed by the APC are thus readily available for presentation via MHC II molecules, and for this reason this antigen presentation pathway is usually referred to as exogenous. As membrane proteins on their way to degradation in lysosomes as part of their normal turn-over are also contained in the endosomal/lysosomal compartments, exogenous antigens must compete with those derived from endogenous components. Autophagy is also a source of endogenous peptides, autophagosomes constitutively fuse with MHC class II loading compartments. In addition to APCs, other cells of the gastrointestinal tract, such as epithelial cells, express MHC class II molecules and CD74 and act as APCs, which is an unusual trait of the GI tract. To produce a MHC class II molecule that presents an antigen, three MHC class II molecules (heterodimers of an alpha and a beta chain) associate with a CD74 trimer in the ER to form a heterononamer. Soon after the entry of this complex into the endosomal/lysosomal system where antigen processing occurs, CD74 undergoes a sequential degradation by various proteases, including CTSS and CTSL, leaving a small fragment termed CLIP (class-II-associated invariant chain peptide). The removal of CLIP is facilitated by HLA-DM via direct binding to the alpha-beta-CLIP complex so that CLIP is released. HLA-DM stabilizes MHC class II molecules until primary high affinity antigenic peptides are bound. The MHC II molecule bound to a peptide is then transported to the cell membrane surface. In B-cells, the interaction between HLA-DM and MHC class II molecules is regulated by HLA-DO. Primary dendritic cells (DCs) also to express HLA-DO. Lysosomal miroenvironment has been implicated in the regulation of antigen loading into MHC II molecules, increased acidification produces increased proteolysis and efficient peptide loading. Aliases: CD antibody, CELIAC1 antibody, DC 1 alpha chain antibody, DC alpha antibody, DC-1 alpha chain antibody, DC-alpha antibody, DC1, included antibody, DQ alpha 1 chain antibody, DQ-A1 antibody, DQ-DRW9 alpha chain antibody, DQA1_HUMAN antibody, FLJ27088 antibody, FLJ27328 antibody, Gluten-sensitive enteropathy (celiac disease) antibody, GSE antibody, HLA class II histocompatibility antigen antibody, HLA class II histocompatibility antigen, DQ alpha 1 chain antibody, HLA class II histocompatibility antigen, DQ(W3) alpha chain antibody, HLA-DCA antibody, HLA-DQA antibody, HLA-DQA1 antibody, HLA-DQA1 major histocompatibility complex, class II, DQ alpha 1 antibody, HLADC histocompatibility type antibody, Immune response antigens HIa, included antibody, leucocyte antigen DQA1 antibody, leukocyte antigen alpha chain antibody, LOC100133678 antibody, LOC100507686 antibody, LOC100509457 antibody, Major histocompatibility complex, class II, DQ alpha 1 antibody, MGC149527 antibody, MHC

## Target Details

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|---|---|
| | class II antigen antibody, MHC class II DQA1 antibody, MHC class II HLA-D alpha glycoprotein antibody, MHC class II HLA-DQ alpha 1 antibody, MHC class II surface glycoprotein antibody, MHC HLA-DQ alpha antibody, OTTHUMP00000029141 antibody, OTTHUMP00000176885 antibody, OTTHUMP00000178551 antibody, OTTHUMP00000178552 antibody, OTTHUMP00000233817 antibody |
| UniProt: | P01909 |
| Pathways: | TCR Signaling, Cancer Immune Checkpoints, Human Leukocyte Antigen (HLA) in Adaptive Immune Response |

## Application Details

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| Application Notes: | Recommended dilution: IHC:1:20-1:200, |
| Restrictions: | For Research Use only |

## Handling

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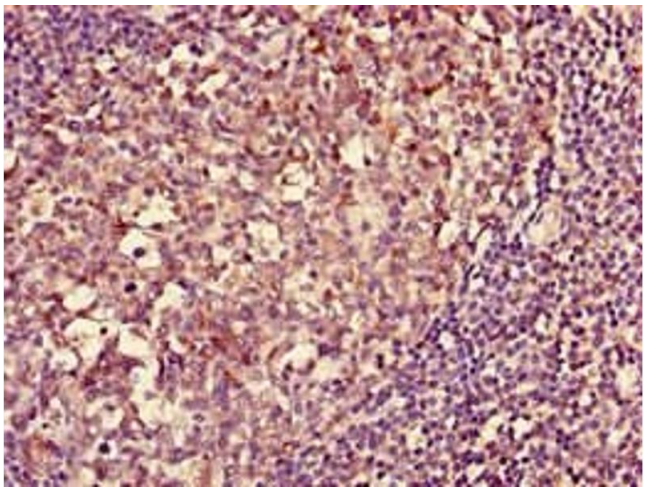
| Format: | Liquid |
| Buffer: | Preservative: 0.03 % Proclin 300<br>Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4 |
| Preservative: | ProClin |
| Precaution of Use: | This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | -20 °C,-80 °C |
| Storage Comment: | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |



## Immunohistochemistry

**Image 1.** Immunohistochemistry of paraffin-embedded human tonsil tissue using ABIN7155590 at dilution of 1:100