

# Datasheet for ABIN7155601 anti-HLA-DRA antibody (AA 28-254)

## 1 Image



#### Overview

Quantity:	100 μg
Target:	HLA-DRA
Binding Specificity:	AA 28-254
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HLA-DRA antibody is un-conjugated
Application:	Immunohistochemistry (IHC), ELISA
Product Details	
Immunogen:	Recombinant Human HLA class II histocompatibility antigen, DR alpha chain protein (28-
	254AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified
Target Details	
Target:	HLA-DRA
Alternative Name:	HLA-DRA (HLA-DRA 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: DASS-397D15.1 antibody, DR alpha chain antibody, DR alpha chain precursor antibody, DRA\_HUMAN antibody, DRB1 antibody, DRB4 antibody, FLJ51114 antibody, Histocompatibility antigen HLA DR alpha antibody, Histocompatibility antigen HLA-DR alpha antibody, HLA class II histocompatibility antigen antibody, HLA class II histocompatibility antigen DR alpha chain antibody, HLA DR1B antibody, HLA DR3B antibody, HLA DRA antibody, HLA DRA1 antibody, HLA DRB1 antibody, HLA DRB3 antibody, HLA DRB4 antibody, HLA DRB5 antibody, HLA-DR histocompatibility type antibody, HLA-DRA antibody, HLADR4B antibody, HLADRA1 antibody, HLADRB antibody, Major histocompatibility complex class II DR alpha antibody, Major histocompatibility complex class II DR beta 1 antibody, Major histocompatibility complex class II DR beta 3 antibody, Major histocompatibility complex class II DR beta 4 antibody, Major histocompatibility complex class II DR beta 5 antibody, MGC117330 antibody, MHC cell surface

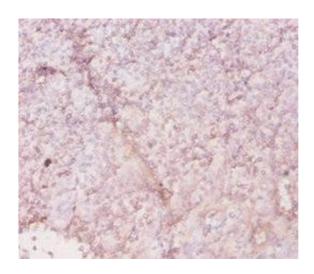
#### **Target Details**

	glycoprotein antibody, MHC class II antigen DRA antibody, MHC II antibody, MLRW antibody, OTTHUMP00000029406 antibody, OTTHUMP00000029407 antibody
UniProt:	P01903
Pathways:	TCR Signaling, CXCR4-mediated Signaling Events, Human Leukocyte Antigen (HLA) in Adaptive Immune Response

### **Application Details**

Application Notes:	Recommended dilution: IHC:1:20-1:200,
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300
	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.

#### **Images**



#### **Immunohistochemistry**

**Image 1.** Immunohistochemistry of paraffin-embedded human tonsil tissue using ABIN7155601 at dilution of 1:20