

Datasheet for ABIN7155618

anti-HLA-DRB1 antibody (AA 31-266) (Biotin)[Go to Product page](#)**2** Images

Overview

Quantity:	100 µg
Target:	HLA-DRB1
Binding Specificity:	AA 31-266
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HLA-DRB1 antibody is conjugated to Biotin
Application:	ELISA, Immunohistochemistry (IHC)

Product Details

Immunogen:	Recombinant Human HLA class II histocompatibility antigen, DRB1-3 chain protein (31-266AA)
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	>95%, Protein G purified

Target Details

Target:	HLA-DRB1
Alternative Name:	HLA-DRB1 (HLA-DRB1 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.

Target Details

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 express HLA-DO. Lysosomal microenvironment has been implicated in the regulation of antigen loading into MHC II molecules, increased acidification produces increased proteolysis and efficient peptide loading. Aliases: HLA class II histocompatibility antigen, DRB1-3 chain (Clone P2-beta-3) (MHC class II antigen DRB1*3), HLA-DRB1

UniProt: [P01912](#)

Pathways: [TCR Signaling](#), [Positive Regulation of Peptide Hormone Secretion](#), [Production of Molecular Mediator of Immune Response](#), [CXCR4-mediated Signaling Events](#), [Cancer Immune Checkpoints](#), [Human Leukocyte Antigen \(HLA\) in Adaptive Immune Response](#)

Application Details

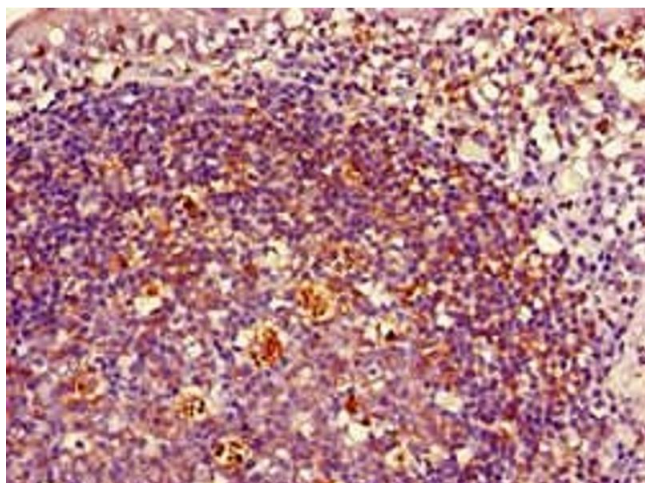
Application Notes: Recommended dilution: IHC:1:20-1:200,

Restrictions: For Research Use only

Handling

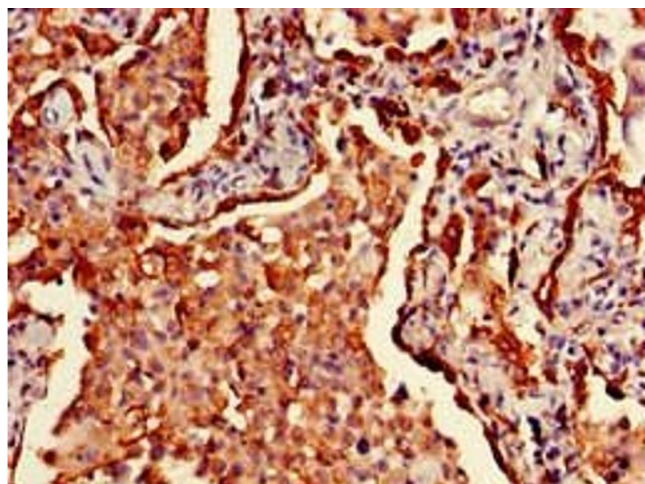
Format:	Liquid
Buffer:	Preservative: 0.03 % Proclin 300 Constituents: 50 % Glycerol, 0.01M PBS, PH 7.4
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon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

Images



Immunohistochemistry

Image 1. Immunohistochemistry of paraffin-embedded human tonsil tissue using ABIN7155618 at dilution of 1:100



Immunohistochemistry

Image 2. Immunohistochemistry of paraffin-embedded human lung cancer using ABIN7155618 at dilution of 1:100