

Datasheet for ABIN2722844

HLA-DRB1 Protein (Myc-DYKDDDDK Tag)[Go to Product page](#)**1** Image

Overview

Quantity:	20 µg
Target:	HLA-DRB1
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This HLA-DRB1 protein is labelled with Myc-DYKDDDDK Tag.
Application:	Antibody Production (AbP), Standard (STD)

Product Details

Characteristics:	<ul style="list-style-type: none">• Recombinant human HLA-DRB1 protein expressed in HEK293 cells.• Produced with end-sequenced ORF clone
Purity:	> 80 % as determined by SDS-PAGE and Coomassie blue staining

Target Details

Target:	HLA-DRB1
Alternative Name:	Hla-Drb1 (HLA-DRB1 Products)
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.

Target Details

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-ce [UniProtKB/Swiss-Prot Function]

Molecular Weight: 27 kDa

NCBI Accession: [NP_002115](#)

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: Recombinant human proteins can be used for:
Native antigens for optimized antibody production
Positive controls in ELISA and other antibody assays

Comment: The tag is located at the C-terminal.

Restrictions: For Research Use only

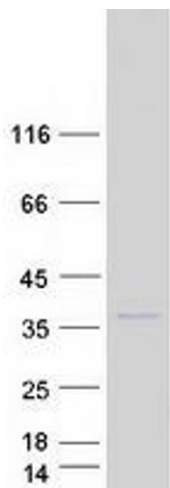
Handling

Concentration: 50 µg/mL

Handling

Buffer:	25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10 % glycerol.
Storage:	-80 °C
Storage Comment:	Store at -80°C. Thaw on ice, aliquot to individual single-use tubes, and then re-freeze immediately. Only 2-3 freeze thaw cycles are recommended.

Images



Western Blotting

Image 1. Validation with Western Blot