

Datasheet for ABIN753931

**anti-HLA-DPB1 antibody (AA 101-210) (Cy3)**[Go to Product page](#)

## Overview

|                      |                                                                                                                                                       |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Quantity:            | 100 µL                                                                                                                                                |
| Target:              | HLA-DPB1                                                                                                                                              |
| Binding Specificity: | AA 101-210                                                                                                                                            |
| Reactivity:          | Human, Mouse                                                                                                                                          |
| Host:                | Rabbit                                                                                                                                                |
| Clonality:           | Polyclonal                                                                                                                                            |
| Conjugate:           | This HLA-DPB1 antibody is conjugated to Cy3                                                                                                           |
| Application:         | Western Blotting (WB), Flow Cytometry (FACS), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)) |

## Product Details

|                   |                                                          |
|-------------------|----------------------------------------------------------|
| Immunogen:        | KLH conjugated synthetic peptide derived from human DPB1 |
| Isotype:          | IgG                                                      |
| Cross-Reactivity: | Human, Mouse                                             |
| Purification:     | Purified by Protein A.                                   |

## Target Details

|                   |                                                                                        |
|-------------------|----------------------------------------------------------------------------------------|
| Target:           | HLA-DPB1                                                                               |
| Alternative Name: | HLA-DPB1 ( <a href="#">HLA-DPB1 Products</a> )                                         |
| Background:       | Synonyms: DPB1, HLA-DP, HLA-DPB, HLA-DP1B, HLA class II histocompatibility antigen, DP |

Target Details

beta 1 chain, HLA class II histocompatibility antigen, DP(W4) beta chain, MHC class II antigen DPB1, HLA-DPB1

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.

|           |                                                                                                                                                       |
|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID:  | 3115                                                                                                                                                  |
| UniProt:  | <a href="#">P04440</a>                                                                                                                                |
| Pathways: | <a href="#">TCR Signaling</a> , <a href="#">Cancer Immune Checkpoints</a> , <a href="#">Human Leukocyte Antigen (HLA) in Adaptive Immune Response</a> |

Application Details

|                    |                    |
|--------------------|--------------------|
| Application Notes: | FCM 1:20-100       |
|                    | IF(IHC-P) 1:50-200 |
|                    | IF(IHC-F) 1:50-200 |

Application Details

|               |                       |
|---------------|-----------------------|
|               | IF(ICC) 1:50-200      |
| Restrictions: | For Research Use only |

Handling

|                    |                                                                                                                    |
|--------------------|--------------------------------------------------------------------------------------------------------------------|
| Format:            | Liquid                                                                                                             |
| Concentration:     | 1 µg/µL                                                                                                            |
| Buffer:            | Aqueous buffered solution containing 0.01M TBS ( pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.        |
| 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                                                                                                             |
| Storage Comment:   | Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles.                                  |
| Expiry Date:       | 12 months                                                                                                          |