

### Anti-HLA-DR antibody [L243] ab136320

★★★★★ [2 Abreviews](#) [11 References](#) [2 图像](#)

#### 概述

产品名称	Anti-HLA-DR抗体[L243]
描述	小鼠单克隆抗体[L243] to HLA-DR
宿主	Mouse
特异性	ab136320 recognizes specifically HLA-DR molecules both peptide-loaded and empty.
经测试应用	<b>适用于:</b> Flow Cyt
种属反应性	<b>与反应:</b> Human
免疫原	Tissue, cells or virus corresponding to Human HLA-DR. Human B lymphocytes.
阳性对照	Flow Cytometry: Human peripheral blood cells.
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### 性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Preservative: 0.1% Sodium azide Constituent: PBS
纯度	Protein A purified
纯化说明	Purified from cell culture supernatant by protein A affinity chromatography. Purity: > 95% (by SDS-PAGE).
克隆	单克隆
克隆编号	L243
同种型	IgG2a

## 应用

**The Abpromise guarantee**      **Abpromise™** 承诺保证使用 ab136320 于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt		Use a concentration of 1 - 4 µg/ml. <b>ab170191</b> - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

## 靶标

## 功能

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 heteronamer. 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 microenvironment has been implicated in the regulation of antigen loading into MHC II molecules, increased acidification produces increased proteolysis and efficient peptide loading.

## 序列相似性

Belongs to the MHC class II family.  
Contains 1 Ig-like C1-type (immunoglobulin-like) domain.

## 翻译后修饰

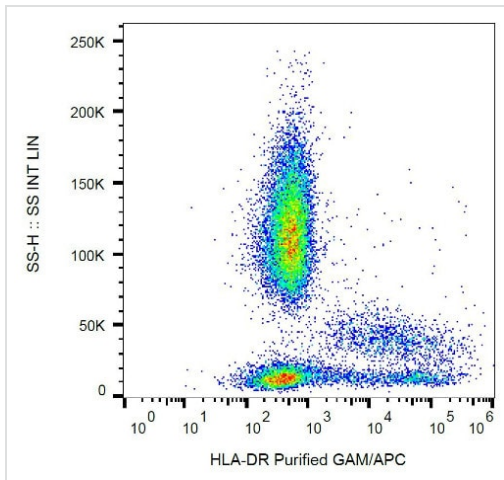
Ubiquitinated by MARCH1 or MARCH8 at Lys-244 leading to down-regulation of MHC class II. When associated with ubiquitination of the beta subunit of HLA-DR: HLA-DRB4 'Lys-254', the down-regulation of MHC class II may be highly effective.

## 细胞定位

Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus > trans-Golgi network membrane. Endosome membrane. Lysosome membrane. Late endosome membrane. The MHC

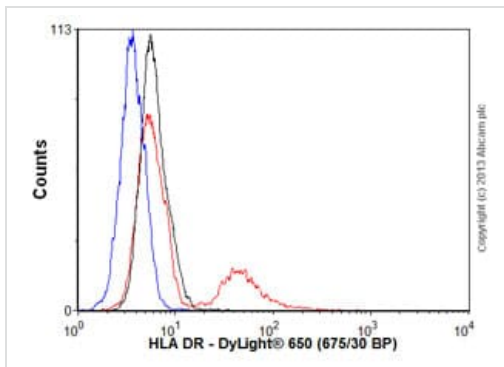
class II complex transits through a number of intracellular compartments in the endocytic pathway until it reaches the cell membrane for antigen presentation.

## 图片



Flow Cytometry - Anti-HLA-DR antibody [L243]  
(ab136320)

Flow Cytometry analysis of human peripheral blood cells labeling HLA DR with ab136320, followed by a Goat anti-mouse-APC secondary.



Flow Cytometry - Anti-HLA-DR antibody [L243]  
(ab136320)

Human peripheral blood lymphocytes stained with ab136320 (red line). Human whole blood was processed using a modified protocol based on Chow *et al*, 2005 (PMID: 16080188).

In brief, human whole blood was fixed in 4% formaldehyde (methanol-free) for 10 minutes at 22°C. Red blood cells were then lysed by the addition of Triton X-100 (final concentration - 0.1%) for 15 minutes at 37°C. For experimentation, cells were treated with 50% methanol (-20°C) for 15 minutes at 4°C. Cells were then incubated with the antibody (ab136320, 0.1µg/1x10<sup>6</sup> cells) for 30 minutes at 4°C. The secondary antibody used was Alexa Fluor<sup>®</sup> 488 goat anti-mouse IgG (H&L) (**ab150113**) at 1/2000 dilution for 30 minutes at 4°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] (**ab91361**, 0.1µg/1x10<sup>6</sup>cells) used under the same conditions. Unlabeled sample (blue line) was also used as a control. Acquisition of >30,000 total events were collected using a solid-state 25mW red diode laser (635nm) and 675/30 bandpass filter. Gating strategy - peripheral blood lymphocytes.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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