# abcam

### Product datasheet

## PE Anti-HLA-DR antibody [MEM-267] ab64676

3 References 3 图像

概述

产品名称 PE Anti-HLA-DR抗体[MEM-267]

描述 PE小鼠单克隆抗体[MEM-267] to HLA-DR

**宿主** Mouse

**偶联物** PE. Ex: 488nm, Em: 575nm

特异性 Reacts with immature dendritic cells that express empty cell surface MHC molecules, but not cells

that express predominantly peptide loaded forms; reacts specifically with the empty but not

peptide-loaded form of HLA-DR1.

免疫原 Recombinant full length protein corresponding to Human HLA-DR.

常规说明

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.

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&As

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C.

**存储溶液** pH: 7.4

Preservative: 0.097% Sodium azide Constituents: PBS, 0.2% BSA

纯**度** Size exclusion

纯**化**说明 The purified antibody (>95% by SDS-PAGE) is conjugated with R-Phycoerythrin (PE) under

optimum conditions. The conjugate is purified by size-exclusion chromatography.

**克隆编号** MEM-267

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同种型 lgG2b

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab64676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 9 mg/ml.

#### 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 an 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.

序列相似性

Belongs to the MHC class II family.

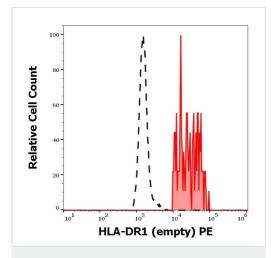
Contains 1 lg-like C1-type (immunoglobulin-like) domain.

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.

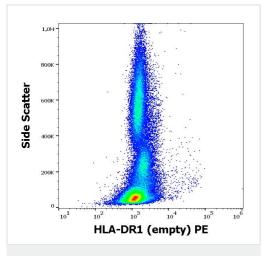
细胞定位

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.



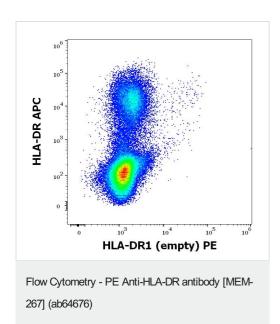
Flow Cytometry - PE Anti-HLA-DR antibody [MEM-267] (ab64676)

Separation of human HLA-DR1 (empty) positive HLA-DR positive cells (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using ab64676 at 9  $\mu$ g/ml.



Flow Cytometry - PE Anti-HLA-DR antibody [MEM-267] (ab64676)

Flow cytometry surface staining pattern of human peripheral whole blood stained using ab64676 at 9  $\mu g/ml$ .



Flow cytometry multicolor surface staining pattern of human peripheral whole blood stained using ab64676 at 9  $\mu$ g/ml and antihuman HLA-DR (APC antibody at 10  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood.

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

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