# abcam

# Product datasheet

# APC Anti-MHC Class II antibody [M5/114.15.2] ab93559

3 References 画像数 1

製品の概要

製品名 APC Anti-MHC Class II antibody [M5/114.15.2]

製品の詳細 APC Rat monoclonal [M5/114.15.2] to MHC Class II

**由来種** Rat

標識 APC. Ex: 645nm, Em: 660nm

アプリケーション 適用あり: Flow Cyt

種交差性 交差種: Mouse

免疫原 Activated C57BL/6 mouse spleen cells.

ポジティブ・コントロール Flow Cyt: Mouse splenocytes.

特記事項 Clone M5/114 is reported to inhibit I-A-restricted T cell responses of the H-2<sup>b</sup>, H-2<sup>d</sup>, H-2<sup>q</sup>, H-2<sup>u</sup>

but not H-2<sup>f</sup>, H-2<sup>k</sup>, or H-2<sup>s</sup> haplotypes.

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

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze. Store In the Dark.

**バッファー** pH: 7.20

Preservative: 0.09% Sodium azide

Constituents: 0.88% Sodium chloride, 0.12% Monobasic dihydrogen sodium phosphate, 0.1%

Gelatin

精製度 Affinity purified

一次抗体 備考 Clone M5/114 is reported to inhibit I-A-restricted T cell responses of the H-2<sup>b</sup>, H-2<sup>d</sup>, H-2<sup>d</sup>, H-2<sup>u</sup>

but not H-2<sup>f</sup>, H-2<sup>k</sup>, or H-2<sup>s</sup> haplotypes.

**ポリ/モノ** モノクローナル

1

**クローン名** M5/114.15.2

アイソタイプ lgG2b

軽鎖の種類 kappa

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab93559の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt		Use at an assay dependent concentration. <b>ab154434</b> - Rat monoclonal lgG2b, is suitable for use as an isotype control with this antibody.

#### ターゲット情報

#### 機能

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 accomodates 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-Il-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.

配列類似性

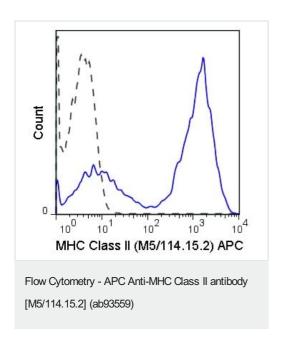
Belongs to the MHC class II family.

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

細胞内局在

Cell membrane. Endoplasmic reticulum membrane. Golgi apparatus > trans-Golgi network membrane. Endosome membrane. Lysosome membrane. The MHC class II complex transits through a number of intracellular compartments in the endocytic pathway until it reaches the cell

### 画像



C57Bl/6 splenocytes stained with  $0.06\mu g$  ab93559 (solid line) or  $0.06\mu g$  rat lgG2b APC isotype control (dashed line).

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