# abcam

## Product datasheet

# Anti-MHC Qa1b antibody [6A8.6F10.1A6] ab72487

2 References 3 图像

概述

产**品名称** Anti-MHC Qa1b抗体[6A8.6F10.1A6]

**'小鼠单克隆抗体**[6A8.6F10.1A6] to MHC Qa1b

宿主 Mouse

经测试应用 适用于: Flow Cyt, WB

种属反应性 与反应: Mouse

免疫原 Synthetic peptide corresponding to Mouse MHC Qa1b.

阳性对照 ConA-stimulated Balb/c mouse splenocytes.

常规说明

ab72487 can be used for flow cytometric assay to detect Qa1b on immuno-regulatory antigen presenting cells and activated splenic T cells on Qa1b expressing mice (e.g. BALB/c, C57BL/6) and it can also be used for functional assays to block target cell recognition by CTLs specific for Qa1 restricted antigen presentation and other functional study where Qa1b associated immuno-regulation may work.

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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**存储溶液** pH: 7.4

Preservative: 0.05% Sodium azide Constituents: 0.05% BSA, PBS

纯**度** Protein G purified

Primary antibody说明 ab72487 can be used for flow cytometric assay to detect Qa1b on immuno-regulatory antigen

presenting cells and activated splenic T cells on Qa1b expressing mice (e.g. BALB/c, C57BL/6)

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and it can also be used for functional assays to block target cell recognition by CTLs specific for Qa1 restricted antigen presentation and other functional study where Qa1b associated immunoregulation may work.

**克隆** 单克隆

**克隆编号** 6A8.6F10.1A6

同种型 lgG1 轻链类型 kappa

#### 应用

#### The Abpromise guarantee

Abpromise™承诺保证使用ab72487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 0.1-0.5µg for 10 <sup>6</sup> cells.  ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
WB		Use a concentration of 1 - 2 μg/ml.

#### 靶标

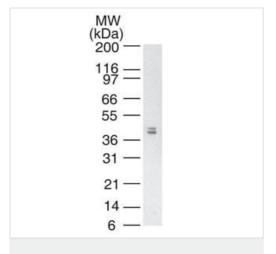
#### 相关性

Qa1b is a murine nonclassical MHC class I molecule, encoded by the T23 gene in the T region. It functions in both innate and adaptive immune responses, regulating NK cell activation and serving as a restriction element for a subpopulation of CD8+ T cells. It is expressed in a wide range of tissues similar to MHC class la molecules. However, Qa1b is relatively nonpolymorphic and is expressed at lower levels than MHC class Ia molecules. In contrast to classical MHC class I molecules, Qa1b predominantly binds a single nonameric peptide, Qa1b determinant modifier (Qdm), derived from the signal sequence of H-2D/L molecules. The Qa-1/Qdm complex serves as a ligand for CD94/NKG2 natural killer (NK) receptor(s) expressed on a major fraction of NK cells and CD8+ immuno-suppressive regulatory T cells. Qa-1b, expressed on immuno-regulatory B cells and other antigen presenting cells, serves for antigen-presentation to immuno-regulatory CD8+ T. Moreover, Qa-1b serves an MHC restrictive function because, unlike conventional MHC molecules, it transiently expresses on activated CD4+ T cells. Recently it has also been shown that Qa-1b is ubiquitously expressed in the immune-privileged anterior chamber of the eye. Additionally, it has been suggested that TCR specific, Qa-1b-restricted regulatory CD8+ T cells selectively down regulate antigen-activated T cells expressing TCRs of certain affinities. These regulatory CD8+ T cells may control the peripheral TCR repertoire during the course of immune responses to both self and foreign antigens. HLA-E is the functional ortholog of Qa-1b in humans.

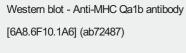
细胞定位

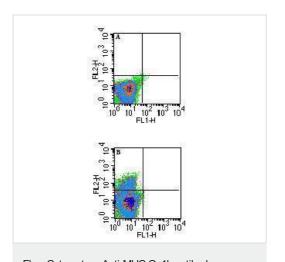
Membrane; Single-pass type I membrane protein.

#### 图片



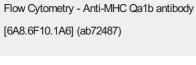
Western blot analysis of mouse thymus tissue lysate using ab72487 at 2  $\mu g/ml$ .

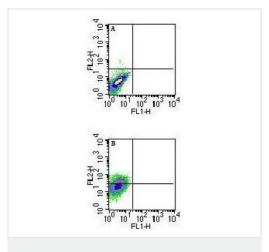




mouse splenocytes using A) isotype control and B) ab72487 (with an anti-mouse lgG1-PE secondary) at 0.25 ug/10<sup>6</sup> cells. A shift is seen in only a small percentage of cells.

Flow cytometric analysis of MHC Qa1b in unstimulated Balb/c





Flow Cytometry - Anti-MHC Qa1b antibody [6A8.6F10.1A6] (ab72487)

Flow cytometric analysis of MHC Qa1b in 72 hour ConA-stimulated Balb/c mouse splenocytes using A) isotype control and B) ab72487 (with an anti-mouse lgG1-PE secondary) at 0.25 ug/ $10^6$  cells. A shift is seen in the entire population of cells.

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

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