# abcam

# Product datasheet

# Anti-CD4 antibody [EPR19514] - Low endotoxin, Azide free ab221775



重组 RabMAb

9 References 8 图像

#### 概述

产品名称 Anti-CD4抗体[EPR19514] - Low endotoxin, Azide free

描述 兔单克隆抗体[EPR19514] to CD4 - Low endotoxin, Azide free

宿主 Rabbit

经测试应用 适用于: IP, IHC-Fr, WB, IHC-P

种属反应性 与反应: Mouse

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Mouse thymus lysate; EL4 whole cell lysate. IHC-P: Mouse spleen and colon tissues. IHC-Fr:

Mouse spleen tissue. IP: Mouse thymus whole cell lysate.

常规说明 ab221775 is the carrier-free version of ab183685.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

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Our <u>Low endotoxin, azide-free formats</u> have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

#### 性能

形式 Liquid

**存放**说明 Shipped at 4°C. Store at +4°C. Do Not Freeze.

**存储溶液** pH: 7.2

Constituent: PBS

无载体 是

纯**度** Protein A purified

**克隆** 单克隆

**克隆编号** EPR19514

同种型 lgG

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab221775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
IP		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.  Antigen retrieval: Heated citrate solution (10mM citrate PH 6.0 + 0.05% Tween-20).
WB		Use at an assay dependent concentration. Detects a band of approximately 51 kDa (predicted molecular weight: 51 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

### 靶标

功能 Accessory protein for MHC class-II antigen/T-cell receptor interaction. May regulate T-cell

activation. Induces the aggregation of lipid rafts.

序列相似性 Contains 3 lg-like C2-type (immunoglobulin-like) domains.

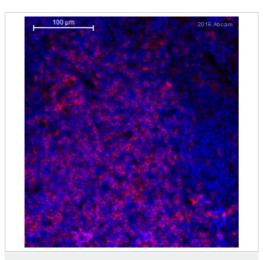
Contains 1 lg-like V-type (immunoglobulin-like) domain.

翻译后修饰 Palmitoylation and association with LCK contribute to the enrichment of CD4 in lipid rafts.

细胞定位 Cell membrane. Localizes to lipid rafts. Removed from plasma membrane by HIV-1 Nef protein

that increases clathrin-dependent endocytosis of this antigen to target it to lysosomal degradation.

#### 图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD4 antibody

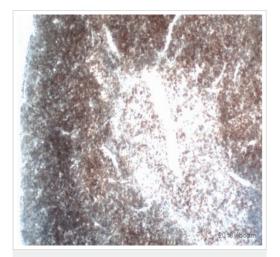
[EPR19514] - Low endotoxin, Azide free (ab221775)

This image is courtesy of an anonymous Abreview.

10% NBF-fixed, paraffin-embedded mouse spleen tissue stained for CD4 using <u>ab183685</u> at 1/2000 dilution in immunohistochemical analysis, followed by Goat anti-Rabbit IgG Alexa Fluor<sup>®</sup> 647.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab183685).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD4 antibody

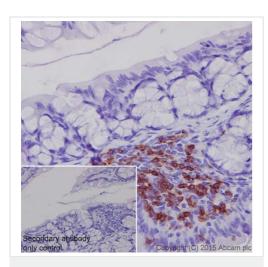
[EPR19514] - Low endotoxin, Azide free (ab221775)

This image is courtesy of an anonymous Abreview.

Formaldehyde-fixed, paraffin-embedded mouse thymus tissue stained for CD4 using <u>ab183685</u> at 1/500 dilution in immunohistochemical analysis.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab183685</u>).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD4 antibody

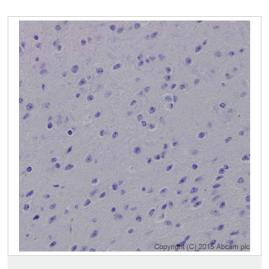
[EPR19514] - Low endotoxin, Azide free (ab221775)

Immunohistochemical analysis of paraffin-embedded Mouse colon tissue labeling CD4 with <a href="mailto:ab183685">ab183685</a> at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<a href="mailto:ab97051">ab97051</a>) at 1/500 dilution. Membrane staining on lymphocytes and negative on epithelium cells of mouse colon is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is <u>ab97051</u> at 1/500 dilution. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab183685).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD4 antibody

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Immunohistochemical analysis of paraffin-embedded

Mouse cerebrum tissue labeling CD4 with <u>ab183685</u> at 1/1000

dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution.

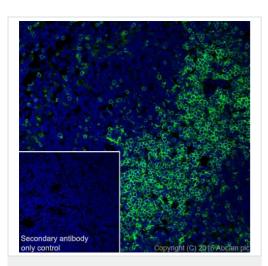
Negative on mouse cerebrum.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab183685).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Frozen sections) - Anti-CD4 antibody [EPR19514] - Low endotoxin, Azide free (ab221775)

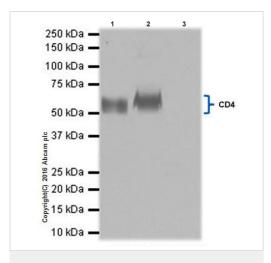
Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen Mouse spleen tissue labeling CD4 with <u>ab183685</u> at 1/500 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor<sup>®</sup> 488) (<u>ab150077</u>) secondary antibody at 1/1000 dilution (green).

The result showed membrane staining on mouse spleen.

The nuclear counterstain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is <u>ab150077</u> at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab183685</u>).



Immunoprecipitation - Anti-CD4 antibody

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CD4 was immunoprecipitated from 1mg of Mouse thymus whole cell lysate with <u>ab183685</u> at 1/40 dilution.

Western blot was performed from the immunoprecipitate using <u>ab183685</u> at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10000 dilution.

Lane 1: Mouse thymus whole cell lysate, 10µg (Input).

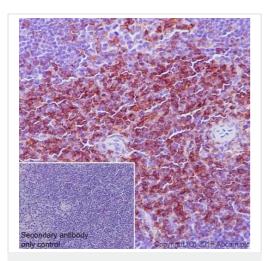
Lane 2: ab183685 IP in Mouse thymus whole cell lysate.

Lane 3: Rabbit  $\lg G$ ,monoclonal [EPR25A] - Isotype Control  $(\underline{ab172730})$  instead of  $\underline{ab183685}$  in Mouse thymus whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 5 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab183685).



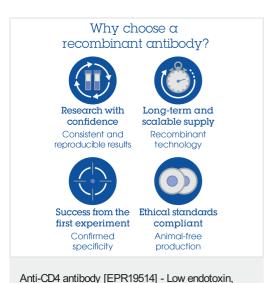
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD4 antibody

[EPR19514] - Low endotoxin, Azide free (ab221775)

This IHC data was generated using the same anti-CD4 antibody clone, EPR19514, in a different buffer formulation (cat# <u>ab183685</u>). Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling CD4 with <u>ab183685</u> at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution. Membrane staining on T cells is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Azide free (ab221775)

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