# abcam

## Product datasheet

## Alexa Fluor® 488 Anti-CD45 antibody [MRC OX-1] ab256254

## 2 图像

常规说明

#### 概述

产品名称 Alexa Fluor® 488荧光Anti-CD45抗体[MRC OX-1]

描述 Alexa Fluor® 488荧光小鼠单克隆抗体[MRC OX-1] to CD45

**宿主** Mouse

偶联物 Alexa Fluor® 488. Ex: 495nm, Em: 519nm

经测试应用 适用于: Flow Cyt, IHC-Fr

种属反应性 与反应: Rat

免疫原 Tissue, cells or virus. This information is proprietary to Abcam and/or its suppliers.

阳性对照 IHC-Fr: Normal rat spleen tissue sections.Flow Cyt: Lewis rat splenocytes.

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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

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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.

Avoid freeze / thaw cycle. Stable for 12 months at -20°C. Store In the Dark.

存储溶液 Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

纯**度** Protein G purified

**克隆** 单克隆

**克隆编号** MRC OX-1

骨髓瘤 NS1 同种型 IgG1

轻链类型 kappa

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab256254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		1/2500.
IHC-Fr		1/50.

#### 靶标

功能 Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor.

Acts as a positive regulator of T-cell coactivation upon binding to DPP4. The first PTPase domain has enzymatic activity, while the second one seems to affect the substrate specificity of the first

one. Upon T-cell activation, recruits and dephosphorylates SKAP1 and FYN.

疾病相关 Defects in PTPRC are a cause of severe combined immunodeficiency autosomal recessive T-

cell-negative/B-cell-positive/NK-cell-positive (T(-)B(+)NK(+) SCID) [MIM:608971]. A form of severe combined immunodeficiency (SCID), a genetically and clinically heterogeneous group of rare congenital disorders characterized by impairment of both humoral and cell-mediated immunity, leukopenia, and low or absent antibody levels. Patients present in infancy recurrent, persistent infections by opportunistic organisms. The common characteristic of all types of SCID

is absence of T-cell-mediated cellular immunity due to a defect in T-cell development.

Genetic variations in PTPRC are involved in multiple sclerosis susceptibility (MS) [MIM:126200]. MS is a neurodegenerative disorder characterized by the gradual accumulation of focal plaques of demyelination particularly in the periventricular areas of the brain. Peripheral nerves are not affected. Onset usually in third or fourth decade with intermittent progression over an extended

period. The cause is still uncertain.

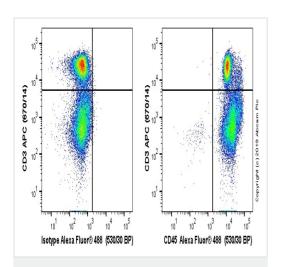
序列相似性 Belongs to the protein-tyrosine phosphatase family. Receptor class 1/6 subfamily.

Contains 2 fibronectin type-III domains.

Contains 2 tyrosine-protein phosphatase domains.

结构域 The first PTPase domain interacts with SKAP1.

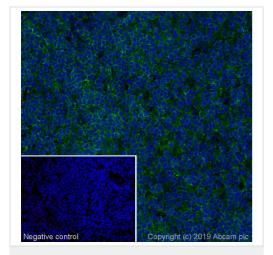
#### 图片



Flow Cytometry - Alexa Fluor® 488 Anti-CD45 antibody [MRC OX-1] (ab256254)

Lewis rat splenocytes stained with ab256254 (right) or mouse lgG1 $\kappa$  Alexa Fluor <sup>®</sup> 488 isotype (left). Lewis rat splenocytes were incubated for 30 min on ice in 1x PBS / 10 % rat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab256254) or mouse lgG1 $\kappa$  Alexa Fluor <sup>®</sup> 488 isotype (1x 10 <sup>6</sup> in 100  $\mu$ l at 0.2  $\mu$ g/ml (1/2500)) for 30 min on ice. The cells were simultaneously stained with CD3.

Acquisition of >30,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter. Events were gated on viable lymphocytes.



Immunohistochemistry (Frozen sections) - Alexa Fluor® 488 Anti-CD45 antibody [MRC OX-1] (ab256254)

IHC image of CD45 staining in a section of frozen normal rat spleen.

The section was fixed using 10% formaldehyde in 1XPBS for 10 minutes. No antigen retrieval step was performed prior to staining. Non-specific protein-protein interactions were then blocked in TBS containing 0.025% (v/v) Triton X-100, 0.3M (w/v) glycine and 1% (w/v) BSA for 1h at room temperature. The section was then incubated overnight at +4°C in TBS containing 0.025% (v/v) Triton X-100 and 1% (w/v) BSA with ab256254 at 1/50 dilution (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). The section was then mounted using Fluoromount<sup>®</sup>.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

For other IHC staining systems (automated and non-automated), customers should optimize variable parameters such as antigen retrieval conditions, antibody concentrations and incubation times.

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

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