abcam

Product datasheet

Anti-CD20 antibody [SP32] ab64088

敲除验证 重组 RabMAb

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概述

产品名称	Anti-CD20抗体[SP32]
描述	兔单克隆抗体[SP32] to CD20
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), WB, mIHC, IHC-P, ICC/IF
种属反应性	**与反应:** Mouse, Rat, Human **预测可用于:** Cow, Dog
免疫原	Synthetic peptide within Human CD20 aa 250 to the C-terminus. The exact sequence is proprietary. Database link: **P11836**
阳性对照	IHC-P: Human tonsil tissue. Mouse and rat spleen tissues. ICC: Ramos cells. Flow Cyt (Intra): WEHI-231 and Ramos cells. WB: Ramos cell lysate.
常规说明	**This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.**

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: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
纯度	Protein A/G purified
纯化说明	Purified from TCS by protein A/G.
克隆	单克隆
克隆编号	SP32
同种型	IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab64088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 (Intra)		1/40. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★☆☆ (1)	Use at an assay dependent concentration.
mIHC		Use at an assay dependent concentration.
IHC-P	★★★★★ (6)	1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	1/100.

靶标

功能 This protein may be involved in the regulation of B-cell activation and proliferation.

组织特异性 Expressed on B-cells.

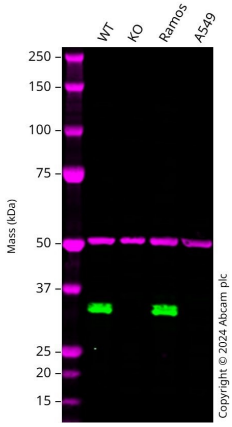
疾病相关 Defects in MS4A1 are the cause of immunodeficiency common variable type 5 (CVID5) [MIM:613495]; also called antibody deficiency due to CD20 defect. CVID5 is a primary immunodeficiency characterized by antibody deficiency, hypogammaglobulinemia, recurrent bacterial infections and an inability to mount an antibody response to antigen. The defect results from a failure of B-cell differentiation and impaired secretion of immunoglobulins; the numbers of circulating B cells is usually in the normal range, but can be low.

序列相似性 Belongs to the MS4A family.

翻译后修饰 Phosphorylated. Might be functionally regulated by protein kinase(s).

细胞定位 Membrane.

图片



Western blot - Anti-CD20 antibody [SP32] (ab64088)

All lanes : Anti-CD20 antibody [SP32] (ab64088) at 1/1000 dilution

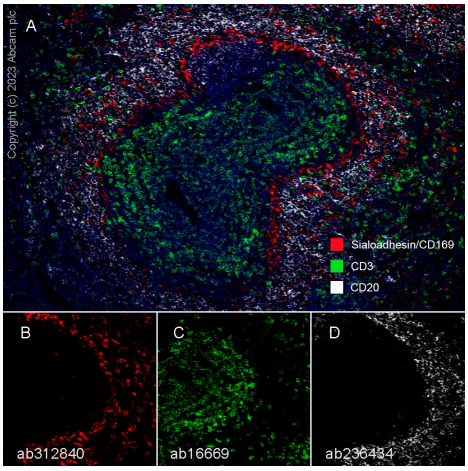
Lane 1 : Wild-type Raji cell lysate
Lane 2 : MS4A1 knockout Raji cell lysate
Lane 3 : Ramos cell lysate
Lane 4 : A549 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Observed band size: 33 kDa

Western blot: Anti-MS4A1 antibody [SP32] (ab64088) staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (**ab7291**) loading control staining at 1/20000 dilution, shown in magenta. In Western blot, ab64088 was shown to bind specifically to MS4A1. A band was observed at 33 kDa in wild-type Raji cell lysates with no signal observed at this size in MS4A1 knockout cell line. To generate this image, wild-type and MS4A1 knockout Raji cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Multiplex immunohistochemistry - Anti-CD20 antibody [SP32] (ab64088)

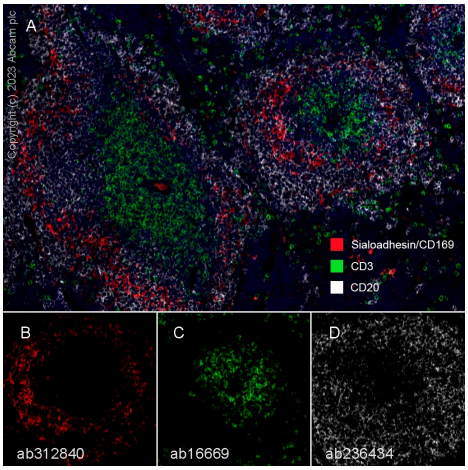
This image was generated using **ab236434**, the same clone, but with a different buffer formulation.

Multiplex immunohistochemistry analysis of formalin/PFA-fixed paraffin-embedded Rat spleen tissue labeling Sialoadhesin/CD169, CD3 and CD20 with **ab312840** at 1/100 dilution, **ab16669** at 1:150 dilution and **ab236434** at 1:5000 dilution.

Panel A: merged staining of anti-Sialoadhesin/CD169 (red; Opal™690), anti-CD3 (green; Opal™520) and anti-CD20 (gray; Opal™570) on rat spleen.
Panel B: anti-Sialoadhesin/CD169 stained on macrophages.
Panel C: anti-CD3 stained on T cells.
Panel D: anti-CD20 stained on B cells.

The section was incubated in three rounds of staining: in the order of **ab312840**, **ab16669**, and **ab236434** for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.



Multiplex immunohistochemistry - Anti-CD20 antibody [SP32] (ab64088)

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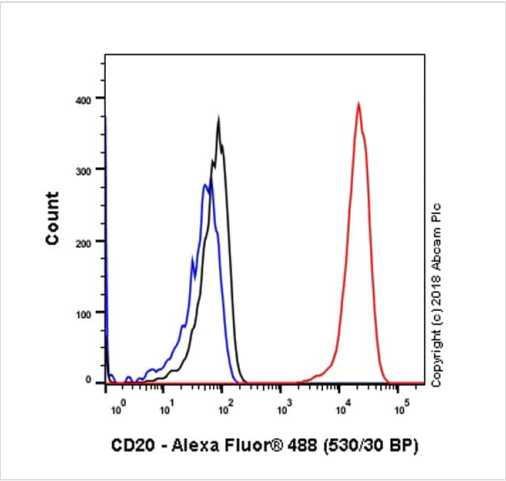
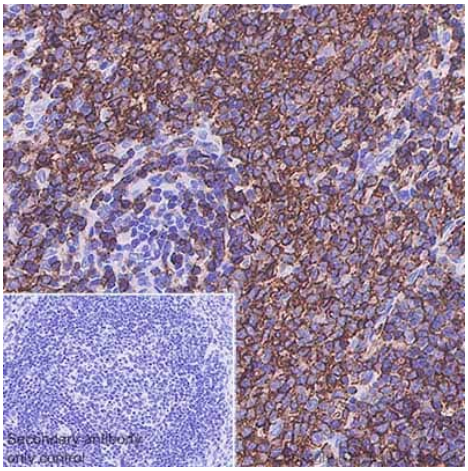


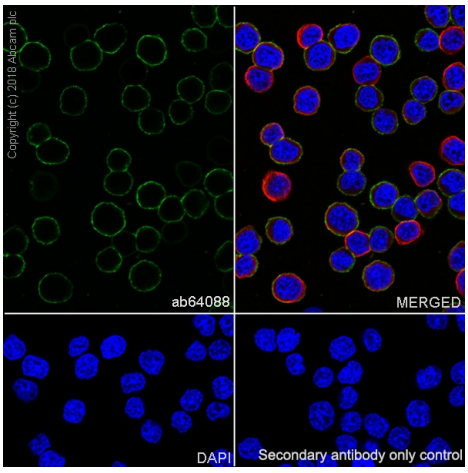
Flow Cytometry (Intracellular) - Anti-CD20 antibody [SP32] (ab64088)

Flow cytometry analysis of Ramos (human Burkitt's lymphoma) labeling CD20 with purified ab64088 at 1/40 dilution (7.78 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as a secondary antibody. Isotype control -Rabbit monoclonal IgG (**ab172730**) (Black). Unlableled control -Unlabelled cells (blue).



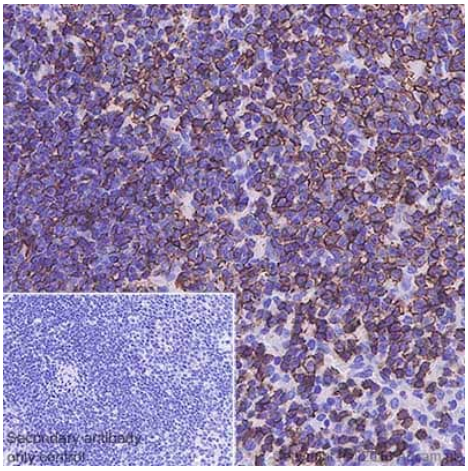
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [SP32] (ab64088)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat spleen tissue sections labeling CD20 with ab64088 at 1/100 dilution (3.11 µg/ml). Heat mediated antigen retrieval with citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on rat spleen, performed on a Leica Biosystems BOND™ RX instrument.
The section was incubated with ab64088 for 30 mins at room temperature



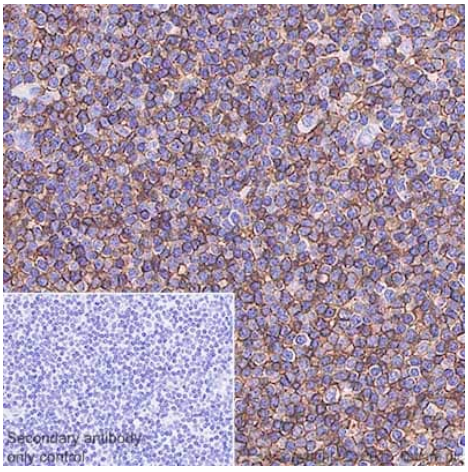
Immunocytochemistry/ Immunofluorescence - Anti-CD20 antibody [SP32] (ab64088)

Immunocytochemistry/ Immunofluorescence analysis of Ramos (human Burkitt's lymphoma B lymphocyte) cells labeling CD20 with purified ab64088 at 1/100 (3.1 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



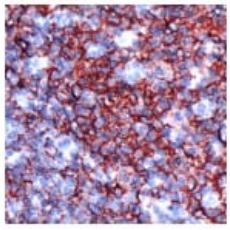
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [SP32] (ab64088)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse spleen tissue sections labeling CD20 with ab64088 at 1/100 dilution (3.11 µg/ml). Heat mediated antigen retrieval with citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on mouse spleen, performed on a Leica Biosystems BOND™ RX instrument.
The section was incubated with ab64088 for 30 mins at room temperature.



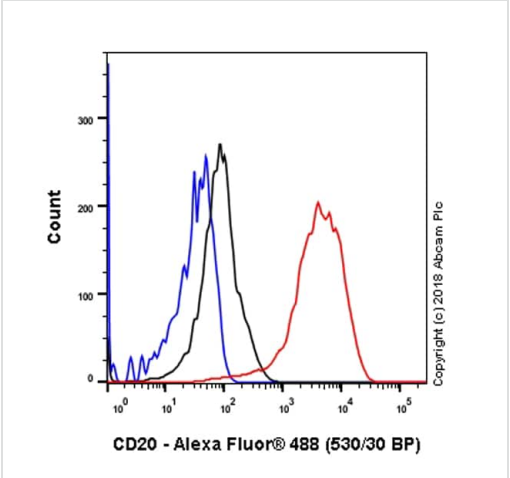
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [SP32] (ab64088)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human tonsil tissue sections labeling CD20 with ab64088 at 1/100 dilution (3.11 µg/ml). Heat mediated antigen retrieval with citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on human tonsil, performed on a Leica Biosystems BOND™ RX instrument.
The section was incubated with ab64088 for 30 mins at room temperature.



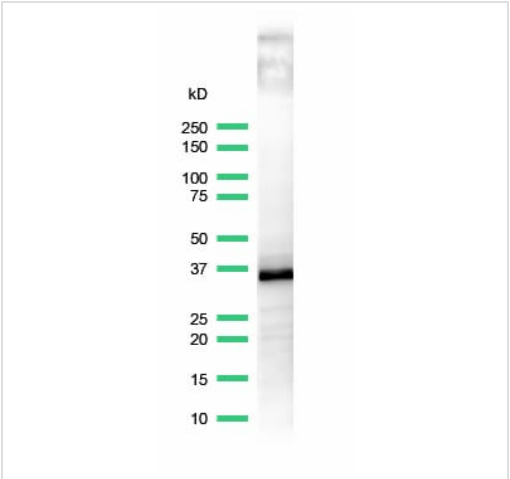
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD20 antibody [SP32] (ab64088)

Immunohistochemical analysis of CD20 expression in formalin fixed, paraffin embedded human tonsil tissue using ab64088 at a 1/100 dilution.



Flow Cytometry (Intracellular) - Anti-CD20 antibody [SP32] (ab64088)

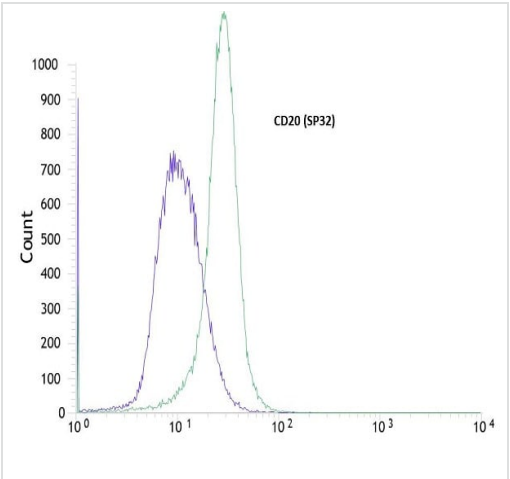
Flow cytometry analysis of WEHI-231 (mouse lymphoblast B cell lymphoma) labeling CD20 with purified ab64088 at 1/40 dilution (7.78 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as a secondary antibody. Isotype control -Rabbit monoclonal IgG (**ab172730**) (Black). Unlableled control -Unlabelled cells (blue).



Western blot - Anti-CD20 antibody [SP32] (ab64088)

Anti-CD20 antibody [SP32] (ab64088) at 1/100 dilution + lysate prepared from Ramos cells

Observed band size: 33 kDa



Flow Cytometry (Intracellular) - Anti-CD20 antibody [SP32] (ab64088)

Flow cytometric analysis of rabbit anti-CD20 (SP32) antibody ab64088(1/100) in Jurkat cells (green) compared to negative control of rabbit IgG (blue).

Anti-CD20 antibody [SP32] (ab64088)

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