# abcam

## Product datasheet

## Anti-CD68 antibody [KP1] ab955



★★★★★ 47 Abreviews 527 References 7 图像

概述

产**品名称** Anti-CD68抗体[KP1]

描述 小鼠单克隆抗体[KP1] to CD68

**宿主** Mouse

经测试应用 适用于: ICC/IF, WB, IHC-P, Mass Cytometry

种属反应性 与反应: Human

预测可用于: Mouse, Rat, Rabbit 4

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

阳性对照 IHC-P: human tonsil and liver tissues; ICC/IF: THP-1 cells; WB: Human spleen lysate, THP-1

whole cell lysate IMC: Human tonsil tissue

常规说明 Anti CD68 antibody (ab955) is reccomended for IHC on human samples but is not reccomended

for mouse & rat samples.

This product has switched from a hybridoma to recombinant production method on 21st

September 2020. The concentration listed relates to the purified version, please contact Scientific

Support for unpurified concentration.

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.

性能

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 or -

80°C. Avoid freeze / thaw cycle.

存储溶液 Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯**度** Protein A purified

1

**克隆** 单克隆

**克隆编号** KP1

骨髓瘤 unknown

**同种型** lgG1

轻链类型 kappa

#### 应用

### The Abpromise guarantee Abpromise™承诺保证使用ab955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
ICC/IF	<b>★★★★★</b> (5)	1/50.
WB	<b>★★★</b> ☆☆ <u>(1)</u>	1/1000. Predicted molecular weight: 37 kDa.
IHC-P	**** <u>(30)</u>	1/3000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
Mass Cytometry		Use at an assay dependent concentration.

#### 靶标

功能 Could play a role in phagocytic activities of tissue macrophages, both in intracellular lysosomal

metabolism and extracellular cell-cell and cell-pathogen interactions. Binds to tissue- and organspecific lectins or selectins, allowing homing of macrophage subsets to particular sites. Rapid recirculation of CD68 from endosomes and lysosomes to the plasma membrane may allow

macrophages to crawl over selectin-bearing substrates or other cells.

组织特异性 Highly expressed by blood monocytes and tissue macrophages. Also expressed in lymphocytes,

fibroblasts and endothelial cells. Expressed in many tumor cell lines which could allow them to attach to selectins on vascular endothelium, facilitating their dissemination to secondary sites.

序列相似性 Belongs to the LAMP family.

翻译后修饰 N- and O-glycosylated.

细胞定位 Cell membrane and Endosome membrane. Lysosome membrane.

## 图片



Western blot - Anti-CD68 antibody [KP1] (ab955)

**Lanes 1 & 3**: Anti-CD68 antibody [KP1] (ab955) at 1/1000 dilution **Lanes 2 & 4**: Anti-CD68 antibody [RM1031] (ab303565) at 1/1000 dilution

Lanes 1-2: Human spleen tissue lysate

Lanes 3-4: THP-1 (Human monocytic leukemia monocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

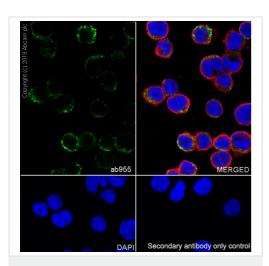
**Predicted band size:** 37 kDa **Observed band size:** 110 kDa

Blocking and diluting buffer and concentration: 5% NFDM /TBST

Exposure time: Lane1: 60 seconds; Lane2: 5 seconds; Lane3: 180 seconds; Lane4: 7 seconds

ab303565 works better than ab955 in western blot testing.

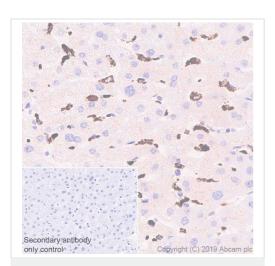
We suggest optimizing experimental protocols (increasing lysate amount, using lower dilution or higher sensitivity ECL substrate) to improve results when using ab955 in western blot.



Immunocytochemistry/ Immunofluorescence - Anti-CD68 antibody [KP1] (ab955)

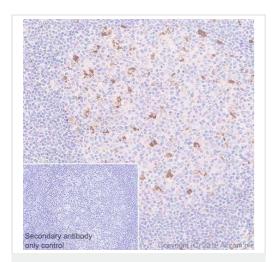
Immunocytochemistry analysis of THP-1 (human monocytic leukemia monocyte) labelling CD68 with ab955 at 1/50 dilution. Cells were fixed with 100% methanol. Goat Anti-mouse IgG H&L (Alexa Fluor® 488) (ab150113) at 1/1000 was used as the secondary antibody (green). Cells were counterstained with Anti-Tubulin antibody (rabbit mAb), ab179504 - AlexaFluor®594 Goat anti- Rabbit secondary, ab150080 at 1/500 dilution (red). Nuclear DNA was labelled with DAPI (blue).

Confocal image showing cytoplasmic staining in THP-1 cells



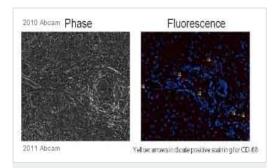
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD68 antibody [KP1] (ab955)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human liver tissue labelling CD68 with ab955 at 1/3000 dilution. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. <a href="mailto:ab93684">ab93684</a> a Goat Anti-mouse IgG H&L (HRP) was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with hematoxylin. Cytoplasmic staining on Kupffer cells of human liver (PMID: 12118106).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD68 antibody [KP1] (ab955)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human tonsil tissue labelling CD68 with ab955 at 1/3000 dilution. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. <a href="mailto:ab93684">ab93684</a> a Goat Anti-mouse IgG H&L (HRP) was used as the secondary antibody. Negative control using PBS instead of primary antibody. Counterstained with hematoxylin. Cytoplasmic staining on macrophages of human tonsil (PMID: 19543531).

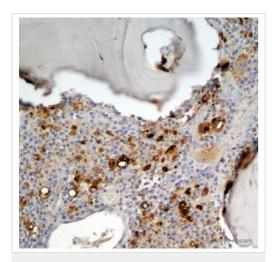


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD68 antibody [KP1] (ab955)

Image courtesy of an anonymous Abreview.

ab955 staining CD68 in human liver tissue by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections).

Tissue was fixed with paraformaldehyde. Samples were then blocked with 10% serum for 3 hours at 22°C followed by incubation with the primary antibody at a 1/100 dilution for 16 hours at 4°C. An Alexa-Fluor<sup>®</sup> 568 conjugated goat anti-mouse polyclonal was used as secondary antibody at a 1/400 dilution.

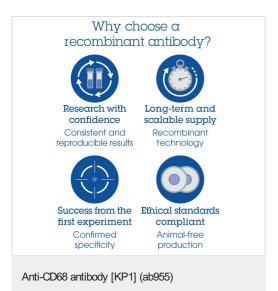


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD68 antibody [KP1] (ab955)

This image is courtesy of an anonymous Abreview

ab955 staining CD68 in human ulcerated oral (Mucosa/Bone) tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections).

Tissue was fixed with paraformaldehyde, permeabilized with 0.1% Triton-X 100 in PBS and blocked with 2.5% serum for 90 minutes at 25°C; antigen retrieval was by heat mediation in citrate buffer (pH 6). Samples were incubated with primary antibody (1/500 in 1% serum in PBS +0.01% Triton-X 100) for 16 hours at 4°C. A commercial IHC kit and DAB was used to visualize the staining.



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