abcam

Product datasheet

Anti-CD46 antibody [EPR4014] - Low endotoxin, Azide free ab229446





RabMAb

10 图像

概述

产品名称 Anti-CD46抗体[EPR4014] - Low endotoxin, Azide free

描述 兔单克隆抗体[EPR4014] to CD46 - Low endotoxin, Azide free

宿主 Rabbit

适用于: IHC-P, WB

不适用于: Flow Cyt or IP

种属反应性 与反应: Human

预测可用于: Rabbit 📤

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Wild-type HAP1 cell lysate. MOLT-4, Jurkat, HeLa and K562 cell lysates. IHC-P: Human

thyroid gland carcinoma, colonic adenocarcinoma, breast carcinoma, kidney, breast, uterus,

placenta and tonsil tissue.

常规说明 ab229446 is the carrier-free version of <u>ab108307</u>.

Our <u>carrier-free</u> 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 cell-based 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.

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.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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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: 7.20

Constituent: PBS

无载体 是

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 EPR4014

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab229446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
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.
WB		Use at an assay dependent concentration. Predicted molecular weight: 44 kDa.

应用说明 Is unsuitable for Flow Cyt or IP.

靶标

功能

Acts as a cofactor for complement factor I, a serine protease which protects autologous cells against complement-mediated injury by cleaving C3b and C4b deposited on host tissue. May be involved in the fusion of the spermatozoa with the oocyte during fertilization. Also acts as a costimulatory factor for T-cells which induces the differentiation of CD4+ into T-regulatory 1 cells. T-regulatory 1 cells suppress immune responses by secreting interleukin-10, and therefore are thought to prevent autoimmunity. A number of viral and bacterial pathogens seem to exploit this property and directly induce an immunosuppressive phenotype in T-cells by binding to CD46.

组织特异性

疾病相关

Expressed by all cells except erythrocytes.

Defects in CD46 are a cause of susceptibility to hemolytic uremic syndrome atypical type 2 (AHUS2) [MIM:612922]. An atypical form of hemolytic uremic syndrome. It is a complex genetic disease characterized by microangiopathic hemolytic anemia, thrombocytopenia, renal failure and absence of episodes of enterocolitis and diarrhea. In contrast to typical hemolytic uremic syndrome, atypical forms have a poorer prognosis, with higher death rates and frequent progression to end-stage renal disease. Note=Susceptibility to the development of atypical hemolytic uremic syndrome can be conferred by mutations in various components of or regulatory factors in the complement cascade system. Other genes may play a role in modifying the phenotype. Patients with CD46 mutations seem to have an overall better prognosis compared to patients carrying CFH mutations.

序列相似件

Contains 4 Sushi (CCP/SCR) domains.

结构域

Sushi domains 1 and 2 are required for interaction with human adenovirus B PN/FIBER protein and with Measles virus H protein. Sushi domains 2 and 3 are required for Herpesvirus 6 binding. Sushi domain 3 is required for Neisseria binding. Sushi domains 3 and 4 are required for interaction with Streptococcus pyogenes M protein and are the most important for interaction with C3b and C4b.

翻译后修饰

N-glycosylated on Asn-83; Asn-114 and Asn-273 in most tissues, but probably less N-glycosylated in testis. N-glycosylation on Asn-114 and Asn-273 is required for cytoprotective function. N-glycosylation on Asn-114 is required for Measles virus binding. N-glycosylation on Asn-273 is required for Neisseria binding. N-glycosylation is not required for human adenovirus binding.

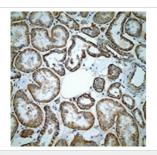
Extensively O-glycosylated in the Ser/Thr-rich domain. O-glycosylation is required for Neisseria binding but not for Measles virus or human adenovirus binding.

In epithelial cells, isoforms B/D/F/H/J/L/3 are phosphorylated by YES1 in response to infection by Neisseria gonorrhoeae; which promotes infectivity. In T-cells, these isoforms may be phosphorylated by Lck.

细胞定位

Cytoplasmic vesicle > secretory vesicle > acrosome inner membrane. Inner acrosomal membrane of spermatozoa. Internalized upon binding of Measles virus, Herpesvirus 6 or Neisseria gonorrhoeae, which results in an increased susceptibility of infected cells to complement-mediated injury. In cancer cells or cells infected by Neisseria, shedding leads to a soluble peptide.

图片



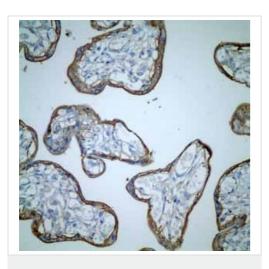
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody

[EPR4014] - Low endotoxin, Azide free (ab229446)

ab108307, at 1/500 dilution, staining CD46 in paraffin-embedded human kidney tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab108307</u>).

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



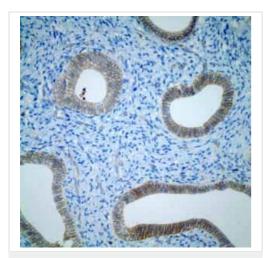
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody

[EPR4014] - Low endotoxin, Azide free (ab229446)

<u>ab108307</u> showing positive staining in human normal placenta tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108307).

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



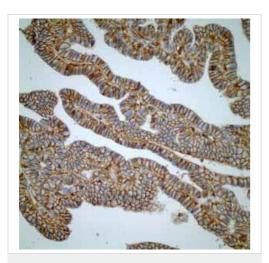
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody

[EPR4014] - Low endotoxin, Azide free (ab229446)

<u>ab108307</u> showing positive staining in human normal uterus tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108307).

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



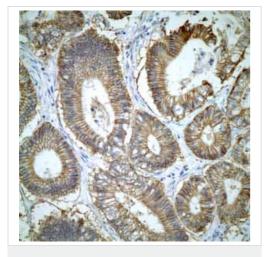
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody

[EPR4014] - Low endotoxin, Azide free (ab229446)

<u>ab108307</u> showing positive staining in human thyroid gland carcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108307).

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody

[EPR4014] - Low endotoxin, Azide free (ab229446)

<u>ab108307</u> showing positive staining in human colonic adenocarcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108307).

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



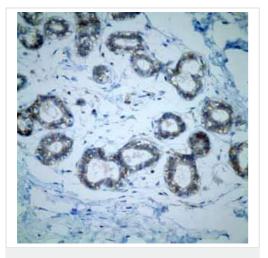
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody

[EPR4014] - Low endotoxin, Azide free (ab229446)

<u>ab108307</u> showing positive staining in human breast carcinoma tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108307).

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody

[EPR4014] - Low endotoxin, Azide free (ab229446)

ab108307 showing positive staining in human normal breast tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab108307).

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

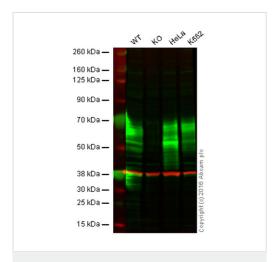


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody

[EPR4014] - Low endotoxin, Azide free (ab229446)

This IHC data was generated using the same anti-CD46 antibody clone, EPR4014, in a different buffer formulation (cat# <u>ab108307</u>). <u>ab108307</u>, at 1/500 dilution, staining CD46 in paraffin-embedded human tonsil tissue.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Western blot - Anti-CD46 antibody [EPR4014] - Low endotoxin, Azide free (ab229446)

This WB data was generated using the same anti-CD46 antibody clone, EPR4014, in a different buffer formulation (cat# <u>ab108307</u>).

Lane 1: Wild-type HAP1 cell lysate (20 µg)

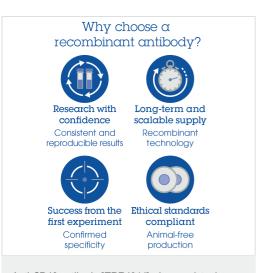
Lane 2: CD46 knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: K562 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - <u>ab108307</u> observed at 50-70 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

<u>ab108307</u> was shown to specifically react with when CD46 knockout samples were used. Wild-type and CD46 knockout samples were subjected to SDS-PAGE. <u>ab108307</u> and <u>ab8245</u> (loading control to GAPDH) were diluted 1/1000 and 1/10 000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preadsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.



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