abcam

Product datasheet

Anti-CD46 antibody [EPR4014] ab108307





重组 RabMAb

★★★★★ 1 Abreviews 14 References 11 图像

概述

产品名称 Anti-CD46抗体[EPR4014]

描述 兔单克隆抗体[EPR4014] to CD46

宿主 Rabbit

经测试应用 适用于: WB, IHC-P

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 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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

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.

Stable for 12 months at -20°C.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

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ab108307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
WB		1/1000 - 1/10000. Predicted molecular weight: 44 kDa.
IHC-P	★★★★★ (1)	1/500 - 1/1000. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.

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

Expressed by all cells except erythrocytes.

疾病相关

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.

序列相似性

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.

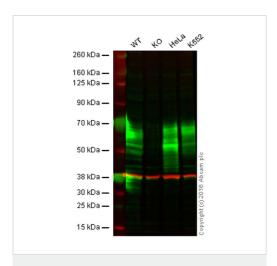
Extensively O-glycosylated in the Ser/Thr-rich domain. O-glycosylation is required for Neisseria binding but not for Measles virus or human adenovirus binding.

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.

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.

细胞定位

图片



Western blot - Anti-CD46 antibody [EPR4014] (ab108307)

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 - ab108307 observed at 50-70 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

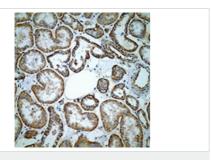
ab108307 was shown to specifically react with when CD46 knockout samples were used. Wild-type and CD46 knockout samples were subjected to SDS-PAGE. ab108307 and <u>ab8245</u> (loading control to GAPDH) were diluted 1/1000 and 1/10 000 respectively and incubated overnight at 4°C. Blots were developed 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.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody
[EPR4014] (ab108307)

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

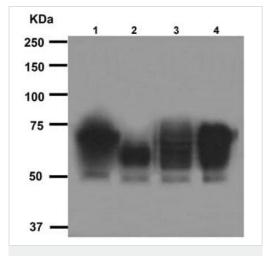
Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody
[EPR4014] (ab108307)

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

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



Western blot - Anti-CD46 antibody [EPR4014] (ab108307)

All lanes : Anti-CD46 antibody [EPR4014] (ab108307) at 1/1000 dilution

Lane 1 : MOLT-4 (Human lymphoblastic leukemia cell line) cell lysate

Lane 2: Jurkat (Human T cell leukemia cell line from peripheral blood) cell lysate

Lane 3 : HeLa (Human epithelial cell line from cervix adenocarcinoma) cell lysate

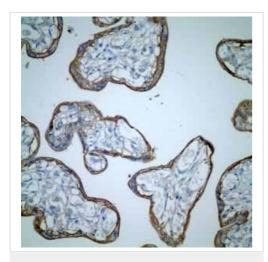
Lane 4: K562 (Human chronic myelogenous leukemia cell line from bone marrow) cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Goat anti-rabbit HRP conjugate at 1/2000 dilution

Predicted band size: 44 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody
[EPR4014] (ab108307)

ab108307 showing positive staining in human normal placenta tissue.

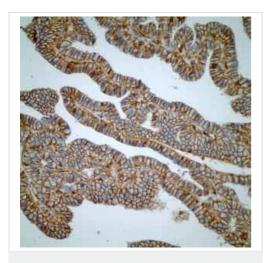
Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody
[EPR4014] (ab108307)

ab108307 showing positive staining in human normal uterus tissue.

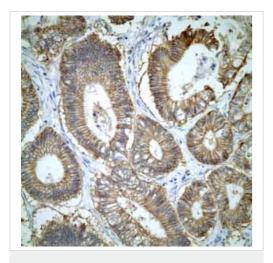
Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody
[EPR4014] (ab108307)

ab108307 showing positive staining in human thyroid gland carcinoma tissue.

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] (ab108307)

ab108307 showing positive staining in human colonic adenocarcinoma tissue.

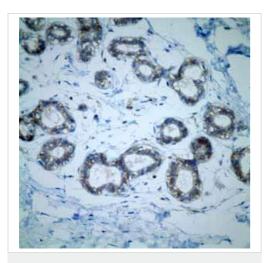
Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody [EPR4014] (ab108307)

ab108307 showing positive staining in human breast carcinoma tissue.

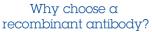
Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CD46 antibody [EPR4014] (ab108307)

ab108307 showing positive staining in human normal breast tissue.

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





Research with confidence Consistent and reproducible results



Long-term and scalable supply Recombinant



Confirmed specificity

Ethical standards compliant Animal-free production

Anti-CD46 antibody [EPR4014] (ab108307)

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