abcam

Product datasheet

Anti-C4d antibody ab87424

1 References 3 图像

概述

产**品名称** Anti-C4d抗体

描述 兔多克隆抗体to C4d

宿主 Rabbit

经测试应用 适用于: IHC-P, WB, ICC/IF

种属反应性 与反应: Human

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

阳性对照 This antibody gave a positive signal in Human Plasma Total Protein Lysate.

常规说明

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

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 pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯**度** Immunogen affinity purified

克隆 多克隆

同种型 IgG

The Abpromise guarantee

Abpromise™承诺保证使用ab87424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 a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 85 kDa (predicted molecular weight: 193 kDa).
ICC/IF		Use a concentration of 5 µg/ml.

٧m	ш	_
414	1	冧
ᇺ	•	ינע

功能

疾病相关

C4 plays a central role in the activation of the classical pathway of the complement system. It is processed by activated C1 which removes from the alpha chain the C4a anaphylatoxin. The remaining alpha chain fragment C4b is the major activation product and is an essential subunit of the C3 convertase (C4b2a) and the C5 convertase (C3bC4b2a) enzymes of the classical complement pathway.

Derived from proteolytic degradation of complement C4, C4a anaphylatoxin is a mediator of local inflammatory process. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic leukocytes.

Defects in C4A are the cause of complement component 4A deficiency (C4AD) [MIM:120810]. A rare defect of the complement classical pathway associated with the development of autoimmune disorders, mainly systemic lupus with or without associated glomerulonephritis.

序列相似性 Contains 1 anaphylatoxin-like domain.

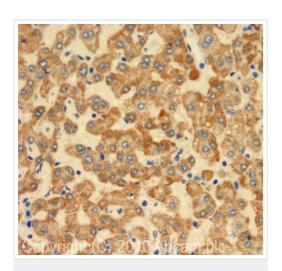
Contains 1 NTR domain.

翻译后修饰 Prior to secretion, the single-chain precursor is enzymatically cleaved to yield the non-identical chains (alpha, beta and gamma). During activation, the alpha chain is cleaved by C1 into C4a and C4b, and C4b stays linked to the beta and gamma chains. Further degradation of C4b by C1 into

the inactive fragments C4c and C4d blocks the generation of C3 convertase. N- and O-glycosylated. O-glycosylated with a core 1 or possibly core 8 glycan.

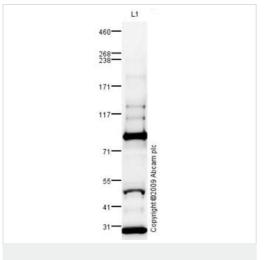
细胞定位 Secreted.

图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-C4d antibody (ab87424)

IHC image of C4d staining in human liver carcinoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond TM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab87424, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Western blot - Anti-C4d antibody (ab87424)

Anti-C4d antibody (ab87424) at 1 μ g/ml + Human Plasma Total Protein Lysate (**ab83997**) at 10 μ g

Secondary

Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP)
(ab65484) at 1/3000 dilution (Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed (HRP))

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 193 kDa **Observed band size:** 193,85 kDa

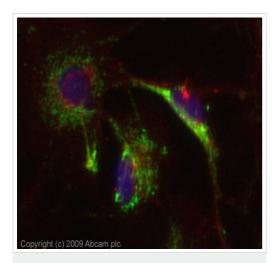
Additional bands at: 110 kDa, 130 kDa, 30 kDa, 48 kDa. We are

unsure as to the identity of these extra bands.

Exposure time: 30 seconds

C4d circulates in blood as a disulfide-linked trimer of an alpha, beta

and gamma chain. Our immunogen sequence is within the alpha chain. The band at 85kDa could correspond to the alpha chain.



Immunocytochemistry/ Immunofluorescence - Anti-C4d antibody (ab87424)

ICC image of ab87424 stained HepG2 cells. The cells were 100% Methanol fixed (5 min) and then incubated in 1%BSA / 10% normal Goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab87424, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 Goat anti-Rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 100% Methanol fixed (5 min) HeLa, and MCF-7 cells at 5µg/ml.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.cn/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors