abcam

Product datasheet

Anti-C3 antibody ab97462

★★★★★ 1 Abreviews 16 References 7 图像

概述

产品名称	Anti-C3抗体
描述	**兔多克隆抗体**to C3
宿主	Rabbit
经测试应用	**适用于:** IHC-P, IP, WB, ICC/IF
种属反应性	**与反应:** Mouse, Human
免疫原	Recombinant fragment, corresponding to a region within amino acids 1498 - 1625 of Human C3.
阳性对照	WB: HepG2 and Huh7 whole cell lysate. ICC/IF: HeLa cells. IHC: H1299 xenograft tissue; mouse brain tissue. IP: HepG2 whole cell extract.
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. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
存储溶液	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 78% PBS, 1% BSA, 20% Glycerol (glycerin, glycerine)
纯度	Immunogen affinity purified
克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee	**Abpromise™承诺保证使用**ab97462**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	★★★★★ (1)	1/100 - 1/1000.
IP		1/100 - 1/500.
WB		1/500 - 1/3000. Predicted molecular weight: 187 kDa.
ICC/IF		1/100 - 1/1000.

靶标

功能

C3 plays a central role in the activation of the complement system. Its processing by C3 convertase is the central reaction in both classical and alternative complement pathways. After activation C3b can bind covalently, via its reactive thioester, to cell surface carbohydrates or immune aggregates.
Derived from proteolytic degradation of complement C3, C3a 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.

组织特异性

Plasma.

疾病相关

Defects in C3 are the cause of complement component 3 deficiency (C3D) [MIM:120700]. A rare defect of the complement classical pathway. Patients develop recurrent, severe, pyogenic infections because of ineffective opsonization of pathogens. Some patients may also develop autoimmune disorders, such as arthralgia and vasculitic rashes, lupus-like syndrome and membranoproliferative glomerulonephritis.
Genetic variation in C3 is associated with susceptibility to age-related macular degeneration type 9 (ARMD9) [MIM:611378]. ARMD is a multifactorial eye disease and the most common cause of irreversible vision loss in the developed world. In most patients, the disease is manifest as ophthalmoscopically visible yellowish accumulations of protein and lipid that lie beneath the retinal pigment epithelium and within an elastin-containing structure known as Bruch membrane.
Defects in C3 are a cause of susceptibility to hemolytic uremic syndrome atypical type 5 (AHUS5) [MIM:612925]. 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.

序列相似性

Contains 1 anaphylatoxin-like domain.
Contains 1 NTR domain.

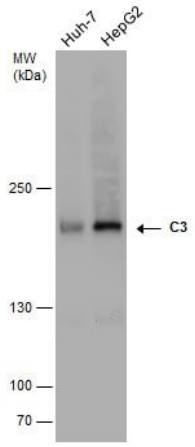
翻译后修饰

C3b is rapidly split in two positions by factor I and a cofactor to form iC3b (inactivated C3b) and C3f which is released. Then iC3b is slowly cleaved (possibly by factor I) to form C3c (beta chain + alpha' chain fragment 1 + alpha' chain fragment 2), C3dg and C3f. Other proteases produce other fragments such as C3d or C3g.
Phosphorylation sites are present in the extracelllular medium.

细胞定位

Secreted.

图片



Western blot - Anti-C3 antibody (ab97462)

All lanes : Anti-C3 antibody (ab97462) at 1/1000 dilution

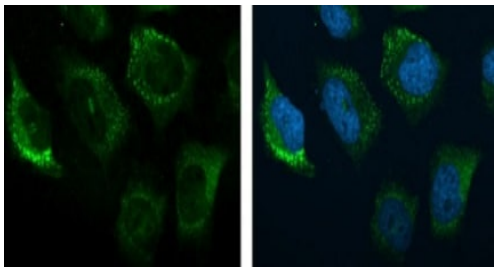
Lane 1 : Huh7 whole cell lysate
Lane 2 : HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 30 µg per lane.

Secondary
All lanes : HRP-conjugated anti-rabbit IgG

Predicted band size: 187 kDa

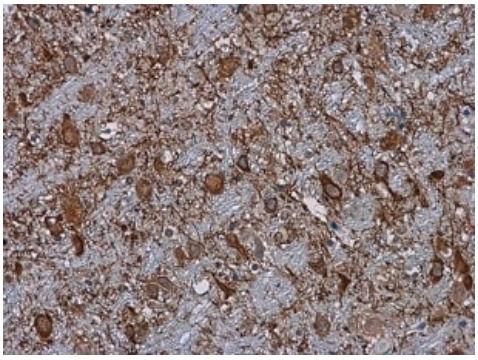
5% SDS-PAGE.



Immunocytochemistry/ Immunofluorescence - Anti-C3 antibody (ab97462)

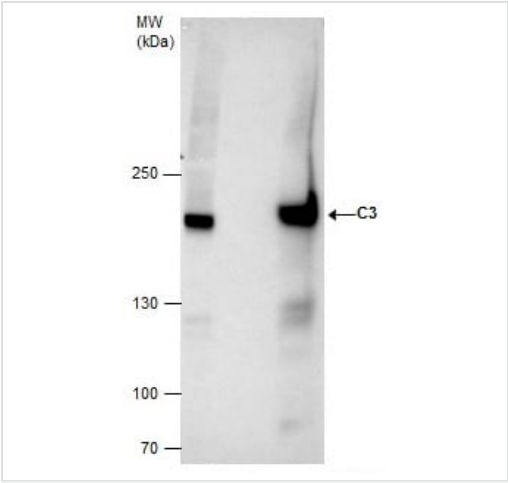
HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling C3 with ab97462 at 1/200 dilution (green) in ICC/IF. Cells were fixed in 4% paraformaldehyde at room temperature for 15 minutes.

Nuclei were stained using Hoechst 33342 (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C3 antibody (ab97462)

Paraffin-embedded mouse brain tissue stained for C3 using ab97462 at 1/500 dilution in immunohistochemical analysis.



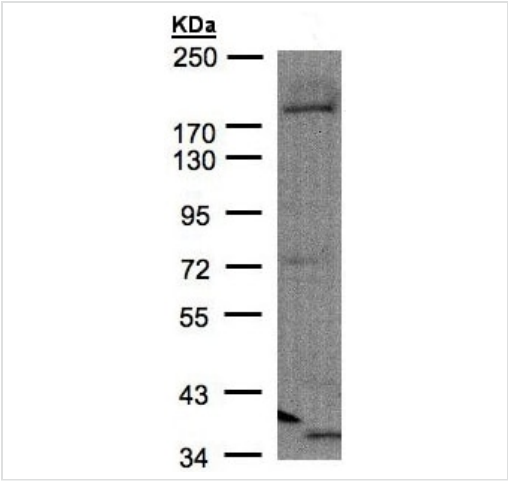
Immunoprecipitation - Anti-C3 antibody (ab97462)

C3 was immunoprecipitated from HepG2 (human liver hepatocellular carcinoma cell line) whole cell extracts using 5 µg of ab97462. Western blot was performed from the immunoprecipitate using ab97462.

Lane 1: HepG2 whole cell extract.

Lane 2: Control IgG instead of ab97462 in HepG2 whole cell extract.

Lane 3: ab97462 IP in HepG2 whole cell extract.

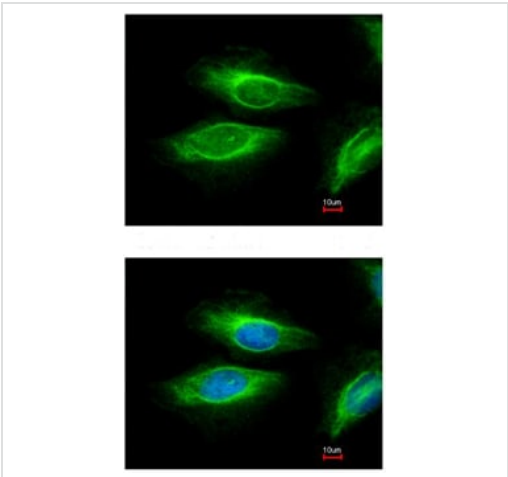


Western blot - Anti-C3 antibody (ab97462)

Anti-C3 antibody (ab97462) at 1/1500 dilution + HepG2 whole cell lysate at 30 µg

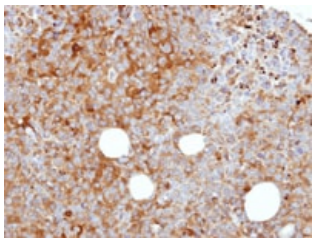
Predicted band size: 187 kDa

7.5% SDS-PAGE.



Immunocytochemistry/ Immunofluorescence - Anti-C3 antibody (ab97462)

ab97462 at 1/100 dilution staining C3 in HeLa cells by Immunofluorescence, Paraformaldehyde fixed. Lower image shows cells co-stained with Hoechst 33342.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-C3 antibody (ab97462)

ab97462 at 1/100 dilution staining C3 in H1299 xenograft by Immunohistochemistry, Paraffin-embedded tissue.

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