# abcam

### Product datasheet

## Anti-C3 antibody [11H9] ab11862

★★★★★ 4 Abreviews 48 References 1 图像

#### 概述

产**品名称** Anti-C3抗体[11H9]

**宿主** Rat

特异性 This antibody recognizes both intact C3 and its cleaved products C3b, iC3b, C3d and C3dg. The

mature protein C3 has a molecular weight of approximately 190 kDa. The complement factor C3 consists of an alpha- and a beta-chain, linked by disulfide bond. C3 convertase activates C3 by cleaving the alpha chain, releasing C3a anaphylotoxin and generating C3b (alpha chain and beta chain). C3b has a molecular weight of approximately 185 kDa. C3b is rapidly split in two positions by factor I and a cofactor to form iC3b (inactivated C3b) and C3f which is released. iC3b has a

molecular weight of approximately 182 kDa. Does not cross react with C4.

 经测试应用
 适用于: ICC/IF

 种属反应性
 与反应: Mouse

免疫原 C57BL/6 thymocytes saturated with rat anti-Thy-1 monoclonal antibody of IgG2b subclass

(RmT1).

常规说明 In response to recent customer complaints for IHC-P with paraffin embedded sections we no

longer guarantee this application.

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 freeze / thaw cycles.

存储溶液 Preservative: 0.02% Sodium azide

Constituents: PBS, 0.1% BSA

纯**度** Protein G purified

1

纯**化说明** 0.2 μm filtered

 克隆
 单克隆

 克隆编号
 11H9

 同种型
 IgG2a

应用

The Abpromise quarantee

Abpromise™承诺保证使用ab11862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		Use at an assay dependent concentration.

#### 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

疾病相关

Plasma.

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 +

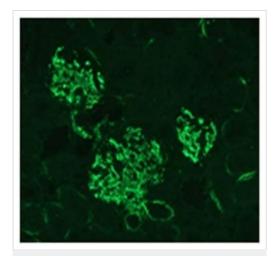
alpha' chain fragment 1 + alpha' chain fragment 2), C3dg and C3f. Other proteases produce other fragments such as C3d or C3g.

Phosphorylation sites are present in the extracelllular medium.

细胞定位

Secreted.

#### 图片



Immunocytochemistry/ Immunofluorescence - Anti-C3 antibody [11H9] (ab11862)

ab11862 staining C3 in murine kidney cells by Immunocytochemistry/ Immunofluorescence.
C3 protein fragments deposited on kidney cells of MPL-lpr mouse.
Glomerular staining pattern.

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 <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

#### Terms and conditions

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