abcam

Product datasheet

Human Complement C3 ELISA Kit ab108822

★★★★★ 1 Abreviews 13 References 2 图像

概述

产品名称 人Complement C3 ELISA试剂盒

检测方法 Colorimetric

精确度

批次内

样品	n	Mean	SD	CV%
Overall				5.2%

批次间

样品	n	Mean	SD	CV%
Overall				10.2%

样品类型 Serum, Plasma

检测类型 Competitive

灵敏度 = 994 µg/ml

范围 1 µg/ml - 5 µg/ml

回收率 105 %

检测时间 3h 00m

实验步骤 Multiple steps standard assay

种属反应性 **与反应:** Human

产品概述 Human Complement C3 ELISA kit is a competitive immunoassay designed for the quantitative measurement of Complement C3 in human plasma and serum.

A Complement C3 specific antibody has been precoated onto 96-well plates and blocked. Standards or test samples are added to the wells and subsequently a Complement C3 specific biotinylated detection protein is added and then followed by washing with wash buffer. Streptavidin-Peroxidase Conjugate is added and unbound conjugates are washed away with wash buffer. TMB is then used to visualize Streptavidin-Peroxidase enzymatic reaction. TMB is catalyzed by Streptavidin-Peroxidase to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is inversely proportional to the amount of Complement C3 captured in plate.

The entire kit may be stored at -20°C for long term storage before reconstitution - Avoid repeated freeze-thaw cycles.

平台 Microplate

性能

存放说明 Store at -20°C. Please refer to protocols.

组件	1 x 96 tests
100X Streptavidin-Peroxidase Conjugate	1 x 80µl
10X Diluent M Concentrate	1 x 30ml
1X Biotinylated Human Complement C3 (Lyophilized)	1 vial
20X Wash Buffer Concentrate	1 x 30ml
Chromogen Substrate	1 x 7ml
Complement C3 Microplate (12 x 8 well strips)	1 unit
Complement C3 Standard (Lyophilized)	1 vial
Sealing Tapes	3 units
Stop Solution	1 x 11ml

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.

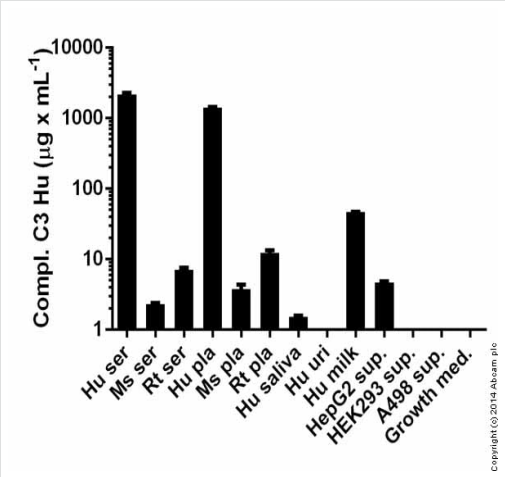
翻译后修饰

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

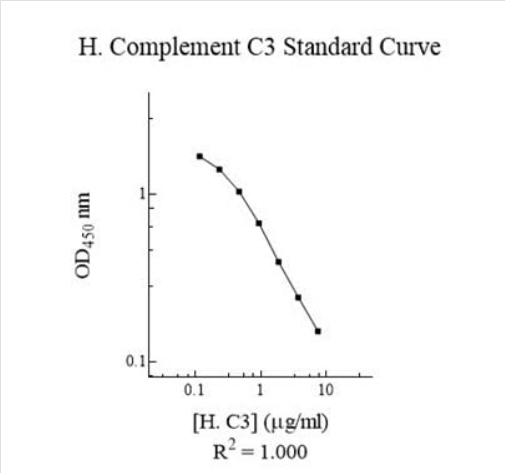
Secreted.

图片



ab108822 Complement C3 Human

Compl. C3 measured in biological fluids showing quantity (micrograms) per mL of tested sample



Typical Standard Curve

Representative Standard Curve using ab108822.

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