abcam

Product datasheet

Mouse Complement C3 ELISA Kit ab157711

26 References 2 图像

概述

产品名称 小鼠Complement C3 ELISA试剂盒

检测方法 Colorimetric

精确度

批次内

样品	n	Mean	SD	CV%
Overall				< 10%

批次间

样品	n	Mean	SD	CV%
Overall				< 10%

样品类型 Serum, Plasma

检测类型 Sandwich (quantitative)

灵敏度 1.6578 ng/well

范围 3.13 ng/ml - 200 ng/ml

回收率 > 85 %

特定样本回收率

样品类型	平均%	范围
Serum	> 85	% - %

实验步骤 Multiple steps standard assay

种属反应性 **与反应:** Mouse

预测可用于: Rat

产品概述 Mouse Complement C3 ELISA kit is a highly sensitive two-site enzyme linked immunoassay (ELISA) for measuring Complement C3 in mouse biological samples.

In this assay the Complement C3 present in samples reacts with the anti- Complement C3 antibodies which have been adsorbed to the surface of polystyrene microtitre wells. After the removal of unbound proteins by washing, anti- Complement C3 antibodies conjugated with horseradish peroxidase (HRP), are added. These enzyme-labeled antibodies form complexes with the previously bound Complement C3. Following another washing step, the enzyme bound to the immunosorbent is assayed by the addition of a chromogenic substrate, 3,3',5,5'-tetramethylbenzidine (TMB). The quantity of bound enzyme varies directly with the concentration of Complement C3 in the sample tested; thus, the absorbance, at 450 nm, is a measure of the concentration of Complement C3 in the test sample. The quantity of Complement C3 in the test sample can be interpolated from the standard curve constructed from the standards, and corrected for sample dilution.

平台 Microplate

性能

存放说明 Store at +4°C. Please refer to protocols.

组件	1 x 96 tests
100X HRP-conjugated anti-mouse Complement C3 antibody	1 x 150µl
20X Wash Buffer Concentrate	1 x 50ml
5X Diluent Concentrate	1 x 50ml
Chromogen Substrate Solution	1 x 12ml
Mouse Complement C3 Calibrator (lyophilized)	1 vial
Mouse Complement C3 ELISA Microplate	1 unit
Stop Solution	1 x 12ml

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.

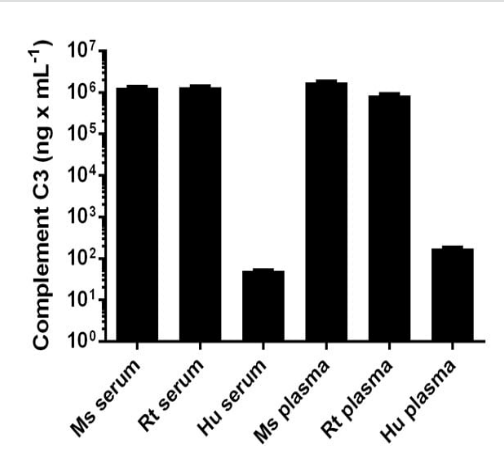
组织特异性 Plasma.

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.

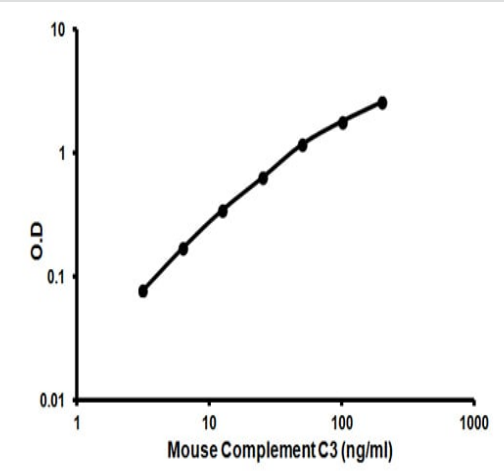
序列相似性	Contains 1 anaphylatoxin-like domain. Contains 1 NTR domain.
翻译后修饰	C3b is rapidly split in two positions by factor I and a cofactor to form iC3b (inactivated C3b) and C3f which is released. Then iC3b is slowly cleaved (possibly by factor I) to form C3c (beta chain + alpha' chain fragment 1 + alpha' 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



Sample results

Complement C3 measured in biological fluids of healthy species showing quantity (ng) per mL of tested sample. Samples were diluted 8000-128000 fold.



Standard Curve

Representative standard curve using ab157711 Complement C3 Mouse ELISA kit.

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