Active Complement Component 3 (C3)

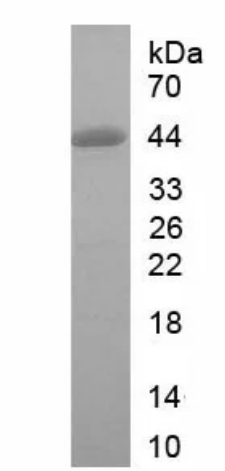
Catalog#:PEH12541

概述（Summary）

别称（Alternative Names）	ASP; CPAMD1; Complement Protein C3; C3 and PZP-like alpha-2-macroglobulin domain-containing protein 1; C3a anaphylatoxin; Acylation stimulating protein
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Leu1000-Glu1326】
Accession #	P01024
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	43.4 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	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. In chronic inflammation, acts as a chemoattractant for neutrophils. It induces the contraction of smooth muscle, increases vascular permeability and causes histamine release from mast cells and basophilic

leukocytes.; Acts as a chemoattractant for neutrophils in chronic inflammation.; adipogenic hormone that stimulates triglyceride (TG) synthesis and glucose transport in adipocytes, regulating fat storage and playing a role in postprandial TG clearance. Appears to stimulate TG synthesis via activation of the PLC, MAPK and AKT signaling pathways. Ligand for C5AR2. Promotes the phosphorylation, ARRB2-mediated internalization and recycling of C5AR2.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

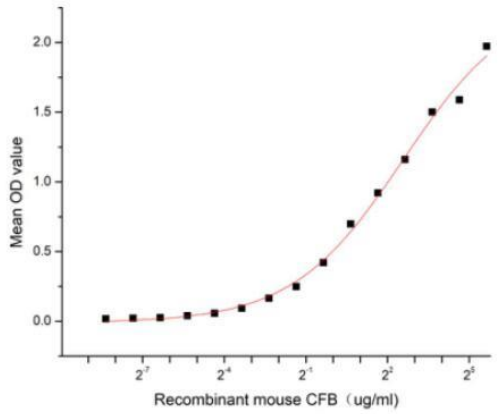


Figure 1. The binding activity of recombinant human C3 and recombinant mouse CFB

Complement Component 3 (C3) is a vital component of the complement system that plays a central role in immune response and inflammation. C3 is a β_2 globulin synthesized by the liver, whose structure consists of two polypeptide chains, α and β, and is the most abundant complement component in serum. It's been identified that C3 can interact with Complement Factor B (CFB), thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human C3 and recombinant mouse CFB. Briefly, CFB was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to C3-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-CFB pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody for 1h at 37℃, wells were

aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50 µL stop solution to the wells and read at 450/630 nm immediately. When Recombinant C3 is immobilized at 2 ug/mL (100 uL/well), the concentration of CFB that produces 50% optimal binding response is found to be approximately 5.96 ug/mL.

注意事项（Note）

For Research Use Only , Not for Diagnostic Use.