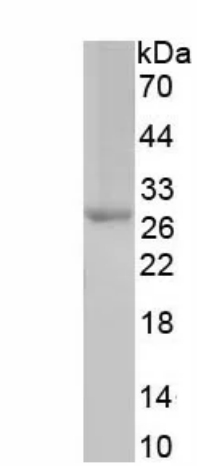
Active Complement Component 1, Q Subcomponent A (C1qA)

Catalog#:PEM12905

概述（Summary）

别称（Alternative Names）	Complement Component 1,q Subcomponent,Alpha Polypeptide
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）	【Glu23-Ala245】
Accession #	P98086
表达宿主（Host）	E.coli
种属（Species）	Mus musculus (Mouse)
预测分子量（Predicted MW）	27.2 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）	C1q associates with the proenzymes C1r and C1s to yield C1, the first component of the serum complement system. The collagen-like regions of C1q interact with the Ca(2+)-dependent C1r(2)C1s(2) proenzyme complex, and efficient activation of C1 takes place on interaction of the globular heads of C1q with the Fc regions of IgG or IgM antibody present in immune complexes.

电泳图（SDS-PAGE image）



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

活性图（Bioactivity image）

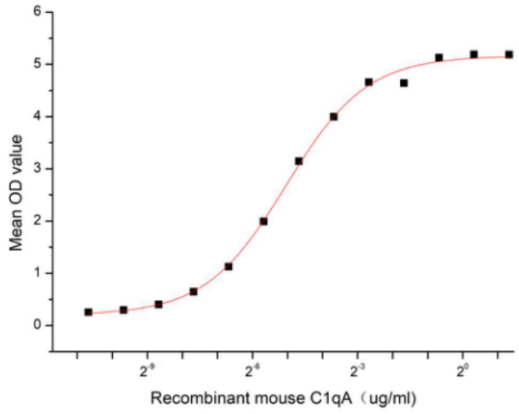


Figure 1. The binding activity of recombinant mouse C1qA and recombinant human CALR

Complement Component 1, Q Subcomponent A (C1qA) is a protein that plays a crucial role in the innate immune system. It is part of the C1 complex, which is the first component of the classical complement pathway. The C1 complex is composed of one molecule each of C1q, C1r, and C1s. C1q is the recognition subcomponent of the complex and and initiating the complement cascade. C1qA plays a key role in eliminating pathogens, regulating inflammatory response and maintaining immune tolerance. It is reported that C1qA can bind to the C-terminal of CALR through its gelatin-as-region, and this interaction may play an important role in regulating complement activation and cell signaling. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant mouse C1qA and recombinant human CALR. Briefly, C1qA was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to CALR-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-C1qA 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. The binding activity of recombinant mouse C1qA and recombinant human CALR was shown in Figure 1, the EC50 for this effect is 0.03 ug/mL.

注意事项（Note）

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