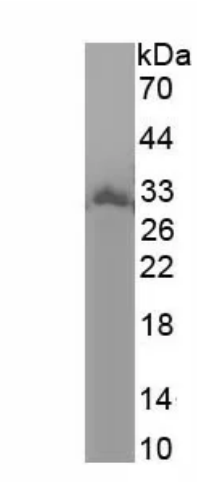
Active Complement Component 1, Q Subcomponent A (C1qA)

Catalog#:PXH12904

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）	【Ala28-Ala245】
Accession #	P02745
表达宿主（Host）	-
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	26.8 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 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）

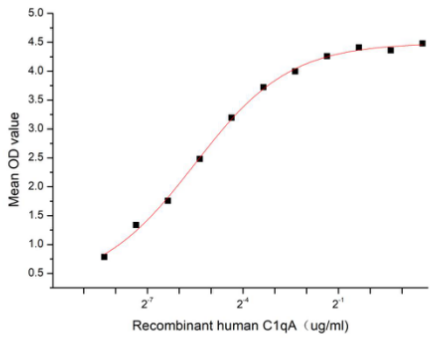


Figure 1. The binding activity of recombinant human C1qA and recombinant mouse C1r

Complement Component 1, Q Subcomponent A (C1qA) is a subunit of the C1q complex in the complement system. It has a crucial role in recognizing pathogens and immune complexes. Structurally, it contributes to the overall architecture of C1q, enabling it to interact with various ligands. Functionally, it is essential for initiating the classical complement pathway.Binding of C1qA to C1r activates C1r, triggering the classical complement cascade for pathogen elimination and immune response regulation.Thus a functional ELISA assay was conducted to detect the interaction of recombinant human C1qA and recombinant mouse C1r. Briefly, C1qA was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to C1r-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 450/630nm immediately. The binding activity of recombinant human C1qA and recombinant mouse C1r was shown in Figure 1, the EC50 for this effect is 0.022ug/mL.

注意事项（Note）

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