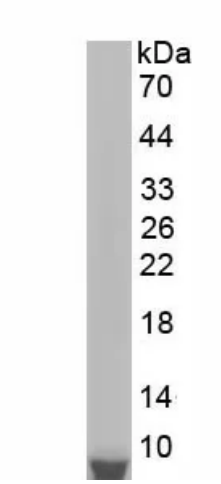
Active C4 Binding Protein Alpha (C4BPa)

Catalog#:PEH12710

概述（Summary）

别称（Alternative Names）	C4BP-a; PRP; C4BP; Complement Component 4 Binding Protein,Alpha; Proline-rich 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）	【Gln548-Leu597】
Accession #	P04003
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	7.1 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）	Controls the classical pathway of complement activation. It binds as a cofactor to C3b/C4b inactivator (C3bINA), which then hydrolyzes the complement fragment C4b. It also accelerates the degradation of the C4bC2a complex (C3 convertase) by dissociating the complement fragment C2a. Alpha chain binds C4b. It interacts also with anticoagulant protein S and with serum amyloid P component.

电泳图（SDS-PAGE image）



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

活性图（Bioactivity image）

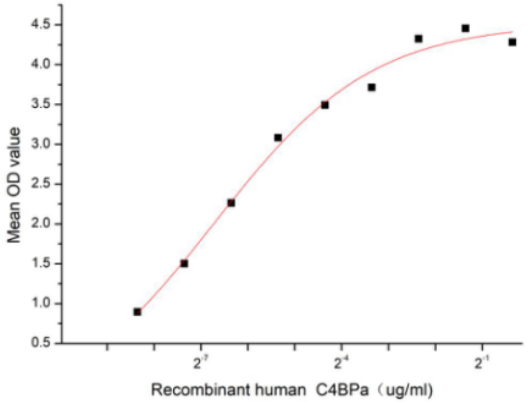


Figure 1. The binding activity of recombinant human C4BPa and recombinant mouse C4b

C4BPa, also known as C4b-binding protein alpha chain or C4BPalpha, is a subunit of the complement factor C4b-binding protein (C4BP), which plays a crucial role in the regulation of the complement system, a part of the immune system that helps to defend the body against infection.C4BPa is part of a heterodimeric protein complex that consists of two chains, the alpha chain (C4BPa) and the beta chain (C4BPB). It can bind to C4b and C3b, thereby inhibiting the formation of the C3 convertase and preventing excessive complement activation. Thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human C4BPa and recombinant mouse C4b. Briefly, C4BPa was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to C4b-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-C4BPa 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 human C4BPa and recombinant mouse C4b was shown in Figure 1, the EC50 for this effect is 0.01 ug/mL

注意事项（Note）

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