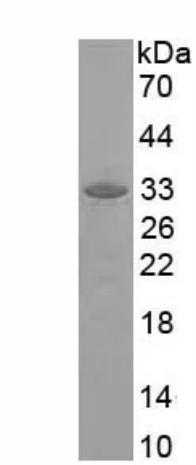
Active Complement Factor B (CFB)

Catalog#:PEM12801

概述（Summary）

别称（Alternative Names）	CF-B; BF; BFD; CFAB; GBG; H2-Bf; PBF2; B-Factor; Properdin; Properdin factor B; C3/C5 convertase; Glycine-rich beta glycoprotein
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Thr25-Arg258】
Accession #	P04186
表达宿主（Host）	E.coli
种属（Species）	Mus musculus (Mouse)
预测分子量（Predicted MW）	29.7 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）	Factor B which is part of the alternate pathway of the complement system is cleaved by factor D into 2 fragments: Ba and Bb. Bb, a serine protease, then combines with complement factor 3b to generate the C3 or C5 convertase.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

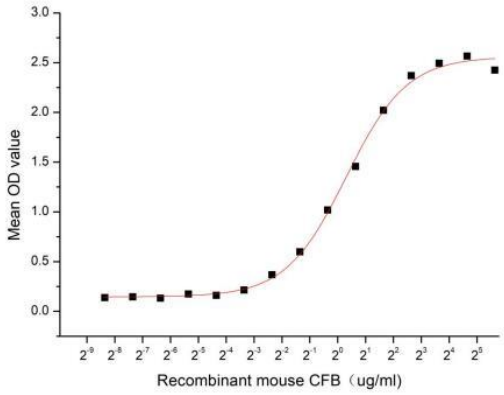


Figure 1. The binding activity of Recombinant mouse CFB and recombinant mouse CFD

Complement factor B (CFB), a 95-kDa protein, is a crucial catalytic element of the alternative pathway (AP) of complement. After binding of CFB to C3b, activation of the AP depends on the proteolytic cleavage of CFB by factor D to generate the C3 convertase (C3bBb). The C3 convertase contains the catalytic subunit of CFB (Bb), the enzymatic site for the cleavage of a new molecule of C3 into C3b. Thus, a binding ELISA assay was conducted to detect the association of recombinant mouse CFB with recombinant mouse CFD. Briefly, biotin-linked recombinant mouse CFB were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to CFD-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then 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 nm immediately. The binding activity of recombinant mouse CFB and recombinant mouse CFD was shown in Figure 1, the EC50 for this effect is 1.238 ug/mL.

注意事项（Note）

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