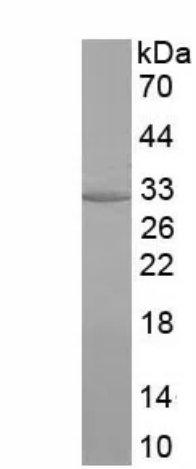
Active Carboxypeptidase B2 (CPB2)

Catalog#:PEH12443

概述（Summary）

别称（Alternative Names）	TAFI; CPU; PCPB; Thrombin Activatable Fibrinolysis Inhibitor; Plasma Carboxypeptidase B; Carboxypeptidase U
纯度（Purity）	Greater than 97% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Glu138-Val386】
Accession #	Q96IY4
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	32.3 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）	Cleaves C-terminal arginine or lysine residues from biologically active peptides such as kinins or anaphylatoxins in the circulation thereby regulating their activities. Down-regulates fibrinolysis by removing C-terminal lysine residues from fibrin that has already been partially degraded by plasmin.

电泳图（SDS-PAGE image）



Greater than 97% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

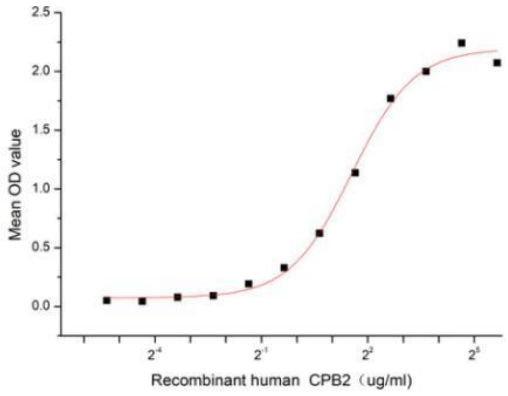


Figure 1. The binding activity of recombinant human CPB2 and recombinant mouse Plg

Carboxypeptidase B2 (CPB2), also known as carboxypeptidase U (CPU) and thrombin-activatable fibrinolysis inhibitor (TAFI), is a member of the peptidase M14 family. CPB2 is synthesized by the liver and circulates in plasma as a plasminogen-bound zymogen. It can cleave C-terminal arginine or lysine residues from biologically active peptides such as kinins or anaphylatoxins in the circulation thereby regulating their activities and Down-regulates fibrinolysis by removing C-terminal lysine residues from fibrin that has already been partially degraded by plasmin. Besides, Plasminogen (Plg) has been identified as an interactor of CPB2, thus a functional binding ELISA assay was conducted to detect the interaction of recombinant human CPB2 and recombinant mouse Plg. Briefly, CPB2 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to Plg-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST and incubated for 1h with anti-CPB2 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 CPB2 and recombinant mouse Plg was shown in Figure 1, the EC50 for this effect is 2.9 ug/mL.

注意事项（Note）

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