

APA615Hu01 100µg
Active Carboxypeptidase B2 (CPB2)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Glu138~Val386

Tags: N-terminal His-tag

Purity: >97%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5%Trehalose .

Original Concentration: 200µg/mL

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 8.7

Predicted Molecular Mass: 32.3kDa

Accurate Molecular Mass: 32kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[SEQUENCE]

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ERH PDMLTKIHIG  
SSFKEYPLYV LKVSGKEQAA KNAIWIDCGI HAREWISPAF CLWFIGNRM  
WRKNRSFYAN NHCIGTDLNR NFASKHWCEE GASSSSCSET YCGLYPESEP  
EVKAVASFLR RNINQIKAYI SMHSYSQHIV FPYSYTRSKS KDHEELSLVA  
SEAVRAIEKI SKNTRYTHGH GSETLYLAPG GGDDWIYDLG IKYSFTIELR  
DTGTYGFLLP ERYIKPTCRE AFAAVSKIAW HVIRNV
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[ACTIVITY]

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 μ l were then transferred to Plg-coated microtiter wells and incubated for 1h at 37°C. 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°C, wells were aspirated and washed 5 times. With the addition of substrate

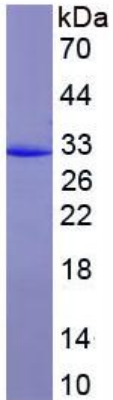


Figure 3. SDS-PAGE

Sample: Active recombinant CPB2, Human

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.