

## Anti-Carboxypeptidase B2/CPB2 Antibody Picoband™

Catalog Number: PB9997

### About CPB2

Carboxypeptidase B2 (CPB2), also known as carboxypeptidase U (CPU), plasma carboxypeptidase B (pCPB) or thrombin-activatable fibrinolysis inhibitor (TAFI), is an enzyme that, in humans, is encoded by the gene CPB2. CPB2 is synthesized by the liver and circulates in the plasma as a plasminogen-bound zymogen. When it is activated by proteolysis at residue Arg92 by the thrombin/thrombomodulin complex, CPB2 exhibits carboxypeptidase activity. Activated CPB2 reduces fibrinolysis by removing the fibrin C-terminal residues that are important for the binding and activation of plasminogen.

### Overview

Product Name	Anti-Carboxypeptidase B2/CPB2 Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-Carboxypeptidase B2/CPB2 Antibody Picoband™ catalog # PB9997. Tested in ELISA, IHC, WB applications. This antibody reacts with Human.
Application	ELISA, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q96IY4

### Technical Details

Immunogen	E. coli-derived human CPB2 recombinant protein (Position: K166-D388). Human CPB2 shares 86.1% and 85.7% amino acid (aa) sequence identity with mouse and rat CPB2, respectively.
Predicted Reactive Species	Bovine
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.1-0.5ug/ml, Human</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, By Heat</p> <p>ELISA(Cap) , 1-5ug/ml, Human, -</p>

## Anti-Carboxypeptidase B2/CPB2 Antibody Picoband™ (PB9997) Images



Figure 1. Western blot analysis of CPB2 using anti-CPB2 antibody (PB9997).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

Lane 2: HEPG2 whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-CPB2 antigen affinity purified polyclonal antibody (Catalog # PB9997) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for CPB2 at approximately 48 kDa, 60 kDa. The expected band size for CPB2 is at 48 kDa.

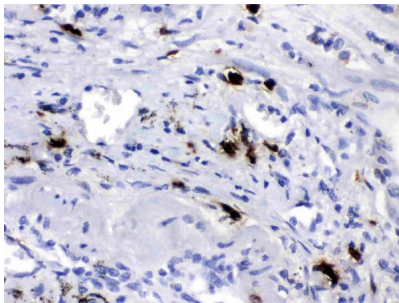


Figure 2. IHC analysis of CPB2 using anti-CPB2 antibody (PB9997).

CPB2 was detected in a paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-CPB2 Antibody (PB9997) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

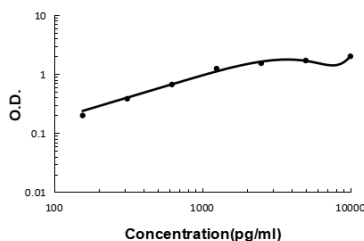


Figure 3. Sandwich ELISA - Recombinant human CPB2 protein standard curve.

Use in combination with reagents from Human CPB2 ELISA Kit EZ-Set (DIY Antibody Pairs) (EZ1502).

## 1 Publications Citing This Product

1. PubMed ID: 19018804, INVOLVEMENT OF PROLYLCARBOXYPEPTIDASE IN THE EFFECT OF RUTAECARPINE ON THE REGRESSION OF MESENTERIC ARTERY HYPERTROPHY IN RENOVASCULAR HYPERTENSIVE RATS

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