

## Anti-Carboxypeptidase E/CPE Antibody Picoband®

Catalog Number: A01407-2

### About CPE

This gene encodes a member of the M14 family of metallo-carboxypeptidases. The encoded preproprotein is proteolytically processed to generate the mature peptidase. This peripheral membrane protein cleaves C-terminal amino acid residues and is involved in the biosynthesis of peptide hormones and neurotransmitters, including insulin. This protein may also function independently of its peptidase activity, as a neurotrophic factor that promotes neuronal survival, and as a sorting receptor that binds to regulated secretory pathway proteins, including prohormones. Mutations in this gene are implicated in type 2 diabetes.

### Overview

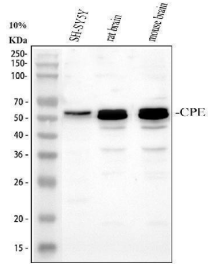
Product Name	Anti-Carboxypeptidase E/CPE Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Carboxypeptidase E/CPE Antibody catalog # A01407-2. Tested in ELISA, IP, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, IP, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
Storage Instructions	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 freezing and thawing.
Host	Rabbit
Uniprot ID	P16870

### Technical Details

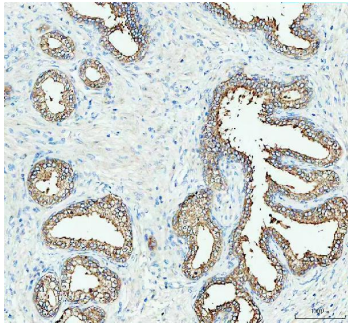
Immunogen	E.coli-derived human CPE recombinant protein (Position: 128-473).
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Human, Rat

	Immunoprecipitation, 0.5-2 ug/ml, Human ELISA, 0.1-0.5 ug/ml, -
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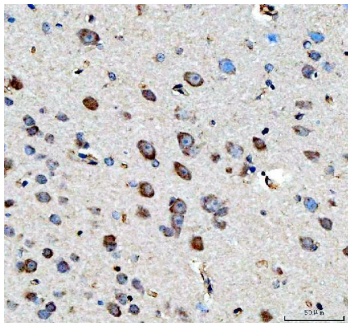
## Anti-Carboxypeptidase E/CPE Antibody Picoband® (A01407-2) Images



Western blot analysis of CPE using anti-CPE antibody (A01407-2). Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human SH-SY5Y whole cell lysates, Lane 2: rat brain tissue lysates, Lane 3: mouse brain tissue 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-CPE antigen affinity purified polyclonal antibody (A01407-2) 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 (Catalog # BA1054) at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an ECL Plus Western Blotting Substrate (Catalog # AR1196-200) with Tanon 5200 system. A specific band was detected for CPE at approximately 53 kDa. The expected band size for CPE is at 53 kDa.

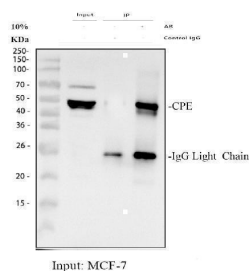


IHC analysis of CPE using anti-CPE antibody (A01407-2). CPE was detected in a paraffin-embedded section of human prostatic cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-CPE Antibody (A01407-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



IHC analysis of CPE using anti-CPE antibody (A01407-2). CPE was detected in a paraffin-embedded section of rat brain 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 2 ug/ml rabbit anti-CPE Antibody (A01407-2) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

Immunoprecipitating (IP) CPE in MCF-7 whole cell lysate. Western blot analysis of CPE using anti-CPE antibody (A01407-2); Lane 1: MCF-7 whole cell lysates (30ug); Lane 2: Rabbit control IgG instead of anti-CPE antibody in MCF-7 whole cell lysate; Lane 3: anti-CPE antibody (2ug) + MCF-7



whole cell lysate (500ug). After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-CPE antigen affinity purified polyclonal antibody (A01407-2) at a dilution of 0.5 ug/mL and probed with a goat anti-rabbit IgG-HRP secondary antibody (Light Chain). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1196-200). A specific band was detected for CPE at approximately 53 kDa. The expected band size for CPE is at 53 kDa.

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### Anti-Carboxypeptidase E/CPE Antibody

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