

## Anti-PCBD1 Antibody Picoband®

Catalog Number: A07264-1

### About PCBD1

Pterin-4-alpha-carbinolamine dehydratase is an enzyme that in humans is encoded by the PCBD1 gene. This gene encodes a member of the pterin-4-alpha-carbinolamine dehydratase family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The encoded protein functions as both a dehydratase involved in tetrahydrobiopterin biosynthesis, and as a cofactor for HNF1A-dependent transcription. A deficiency of this enzyme leads to hyperphenylalaninemia. Alternative splicing results in multiple transcript variants.

### Overview

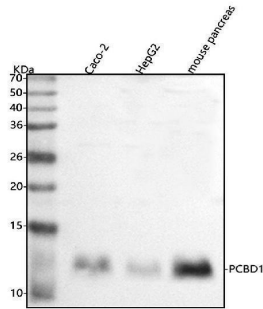
Product Name	Anti-PCBD1 Antibody Picoband®
Reactive Species	Human, Mouse
Description	Boster Bio Anti-PCBD1 Antibody Picoband® catalog # A07264-1. Tested in WB, ICC/IF, ELISA applications. This antibody reacts with Human, Mouse. The brand Picoband indicates this is a premium antibody that guarantees superior 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, IF, ICC, 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	P61457

### Technical Details

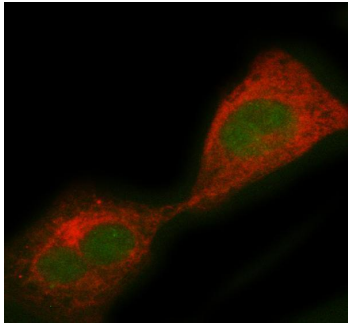
Immunogen	E.coli-derived human PCBD1 recombinant protein (Position: M1-T105). Human PCBD1 shares 99% and 100% amino acid (aa) sequence identity with mouse and rat PCBD1, respectively.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for ICC.
Cross Reactivity	No cross reactivity with other proteins.
Isotype	IgG
Form	Lyophilized

Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Human, Mouse Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human ELISA, 0.1-0.5 ug/ml, -

## Anti-PCBD1 Antibody Picoband® (A07264-1) Images



Western blot analysis of PCBD1 using anti-PCBD1 antibody (A07264-1). 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 Caco-2 whole cell lysates, Lane 2: human HepG2 whole cell lysates, Lane 3: mouse pancreas 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-PCBD1 antigen affinity purified polyclonal antibody (Catalog # A07264-1) 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 PCBD1 at approximately 12 kDa. The expected band size for PCBD1 is at 12 kDa.



IF analysis of PCBD1 using anti-PCBD1 antibody (A07264-1) and anti-Beta Tubulin antibody (M01857-3). PCBD1 was detected in immunocytochemical section of HELA cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-PCBD1 Antibody (A07264-1) and mouse anti-Beta Tubulin antibody (M01857-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) and Cy3 Conjugated Goat Anti-Mouse IgG (BA1031) were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

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### Anti-PCBD1 Antibody

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