

## Anti-Calbindin/CALB1 Antibody Picoband®

Catalog Number: PB9045

### About CALB1

Calbindin is a calcium-binding protein belonging to the troponin C superfamily. Calretinin is expressed in central and peripheral nervous system and in many normal and pathological tissues. The rat and human calretinin exhibit 98% sequence homology and 91% homology to many other species. Two calcium binding proteins, calbindin and calretinin, have been reported to be expressed in abundance in Purkinje cells and other cell types in the cerebellum.

### Overview

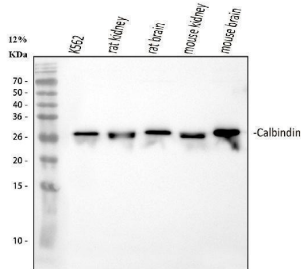
Product Name	Anti-Calbindin/CALB1 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Calbindin/CALB1 Antibody Picoband® catalog # PB9045. Tested in IP, IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody 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	IP, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
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	P05937

### Technical Details

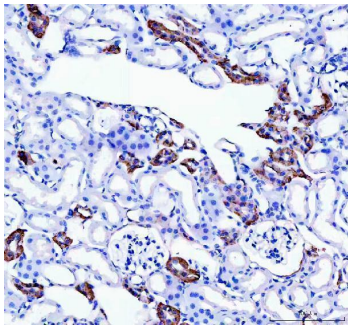
Immunogen	E.coli-derived human Calbindin recombinant protein (Position: A2-E175). Human Calbindin shares 99% amino acid (aa) sequence identity with both mouse and rat Calbindin.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, 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	Western blot, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Mouse, Rat Immunoprecipitation, 0.5-2 ug/ml, Human

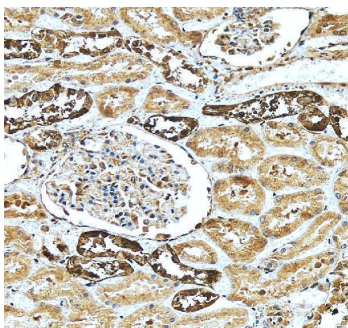
## Anti-Calbindin/CALB1 Antibody Picoband® (PB9045) Images



Western blot analysis of Calbindin using anti-Calbindin antibody (PB9045). 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 K562 whole cell lysates, Lane 2: rat kidney tissue lysates, Lane 3: rat brain tissue lysates, Lane 4: mouse kidney tissue lysates, Lane 5: 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-Calbindin antigen affinity purified polyclonal antibody (Catalog # PB9045) 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 Calbindin at approximately 26 kDa. The expected band size for Calbindin is at 30 kDa.

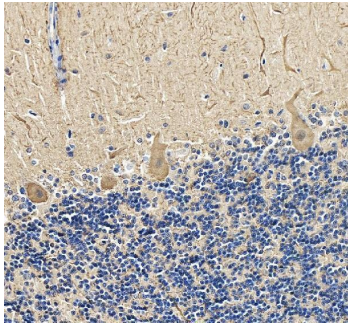


IHC analysis of Calbindin using anti-Calbindin antibody (PB9045). Calbindin was detected in a paraffin-embedded section of mouse kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Calbindin Antibody (PB9045) 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.

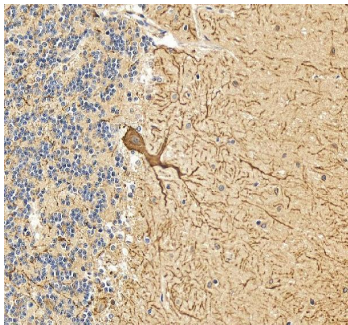


IHC analysis of Calbindin/CALB1 using anti-Calbindin/CALB1 antibody (PB9045). Calbindin/CALB1 was detected in a paraffin-embedded section of human kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Calbindin/CALB1 Antibody (PB9045) 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.

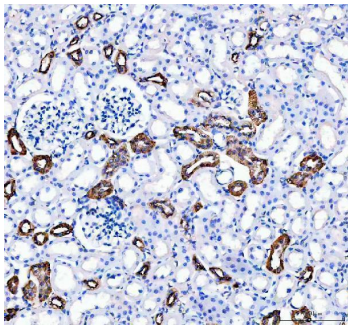
IHC analysis of Calbindin/CALB1 using anti-Calbindin/CALB1 antibody (PB9045). Calbindin/CALB1 was detected in a paraffin-embedded section of human cerebellum tissue.



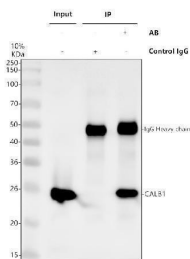
Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Calbindin/CALB1 Antibody (PB9045) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit 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 Calbindin/CALB1 using anti-Calbindin/CALB1 antibody (PB9045). Calbindin/CALB1 was detected in a paraffin-embedded section of human cerebellum 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-Calbindin/CALB1 Antibody (PB9045) 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 Calbindin using anti-Calbindin antibody (PB9045). Calbindin was detected in a paraffin-embedded section of rat kidney 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-Calbindin Antibody (PB9045) 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) Calbindin in K562 whole cell lysate. Western blot analysis of Calbindin using anti-Calbindin antibody (PB9045); Lane 1: K562 whole cell lysates (30ug); Lane 2: Rabbit control IgG instead of anti-Calbindin antibody in K562 whole cell lysate; Lane 3: anti-Calbindin antibody (2ug) + K562 whole cell lysate (500ug). After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Calbindin antigen affinity purified polyclonal antibody (PB9045) at a dilution of 0.5 ug/mL and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1196-200). A specific band was detected for Calbindin at approximately 26 kDa. The expected band size for Calbindin is at 30 kDa.

1. PubMed ID: 10.1016/j.phymed.2018.01.025, Icariside II ameliorates ibotenic acid-induced cognitive impairment and apoptotic response via modulation of MAPK pathway in rats

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Anti-Calbindin/CALB1 Antibody

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