

## Anti-Occludin/OCLN Antibody Picoband®

Catalog Number: A01246-2

### About OCLN

Occludin is an integral membrane protein that is located at tight junctions. It is a member of a family of proteins containing the highly conserved Marvel domain, which contains 4 transmembrane-helix regions. This gene is mapped to 5q13.2. Occludin regulates TGF-beta receptor type I localization for efficient TGF-beta-dependent dissolution of tight junctions during epithelial-mesenchymal transitions. Human Occludin is an essential hepatitis C virus (HCV) cell entry factor that is able to render murine cells infectable with HCV glycoproteins. It has been found that occludin is involved in cell migration and functions to recruit active PI3 kinase to the leading edge, resulting in RAC1 activation and formation of lamellipodia.

### Overview

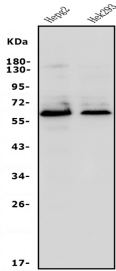
Product Name	Anti-Occludin/OCLN Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-Occludin/OCLN Antibody Picoband® catalog # A01246-2. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody 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, Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.01mg NaN <sub>3</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	Q16625

### Technical Details

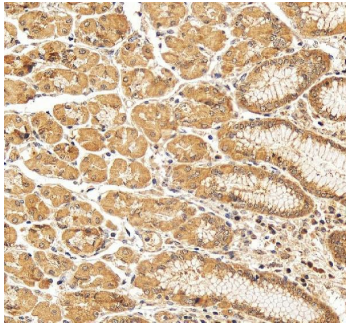
Immunogen	E.coli-derived human Occludin/OCLN recombinant protein (Position: H54-K270).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P) and ICC.
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, 0.25-0.5ug/ml, Human Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human Immunocytochemistry/Immunofluorescence, 5ug/ml, Human Flow Cytometry (Fixed), 1-3ug/1x10 <sup>6</sup> cells, Human ELISA, 0.1-0.5ug/ml, -

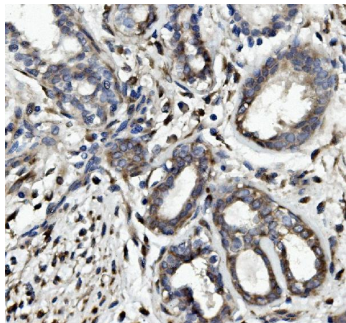
## Anti-Occludin/OCLN Antibody Picoband® (A01246-2) Images



Western blot analysis of Occludin/OCLN using anti-Occludin/OCLN antibody (A01246-2). 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 50ug of sample under reducing conditions. Lane 1: human HepG2 whole cell lysates, Lane 2: human HEK293 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-Occludin/OCLN antigen affinity purified polyclonal antibody (Catalog # A01246-2) 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 at a dilution of 1:10000 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 Occludin/OCLN at approximately 65KD. The expected band size for Occludin/OCLN is at 59KD.

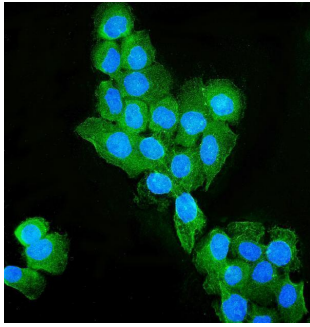


IHC analysis of Occludin/OCLN using anti-Occludin/OCLN antibody (A01246-2). Occludin/OCLN was detected in a paraffin-embedded section of human stomach tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-Occludin/OCLN Antibody (A01246-2) 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.

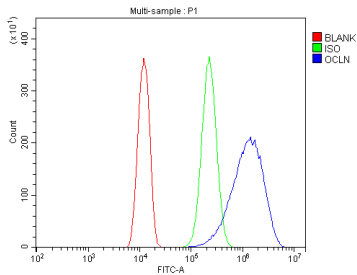


IHC analysis of Occludin/OCLN using anti Occludin/OCLN antibody (A01246-2). Occludin/OCLN was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Occludin/OCLN Antibody (A01246-2) 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.

IF analysis of Occludin/OCLN using anti-Occludin/OCLN antibody (A01246-2). Occludin/OCLN was detected in immunocytochemical section of A431 cells. 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 5ug/mL rabbit anti-Occludin/OCLN Antibody (A01246-2) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of U2OS cells using anti-Occludin/OCLN antibody (A01246-2). Overlay histogram showing U2OS cells stained with A01246-2 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-Occludin/OCLN Antibody (A01246-2, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

## 2 Publications Citing This Product

1. PubMed ID: -, Qing-qing Zhang, Ye Yang, Rong-rong Ren, Qing-qing Chen, Jing-jing Wu, Yu-yu Zheng, Xiao-hui Hou, Yu-feng Zhang, Ming-song Xue, Deng-ke Yin, Self-assembled aggregations in *Coptis chinensis* decoction dynamically regulate intestinal tissue permeability through peyer's patch-associated immunity, *Chinese Herbal Medicines*, 2021,, ISSN 1674-6384, <https://doi.org/10.1016/j.chmed.2021.06.004>.

2. PubMed ID: -, Xiaozhu Tian, Rong Li, Yiming Jiang, Fei Zhao, Zhengsheng Yu, Yiqing Wang, Zixing Dong, Pu Liu, Xiangkai Li, Bifidobacterium breve ATCC15700 pretreatment prevents alcoholic liver disease through modulating gut microbiota in mice exposed to chronic alcohol intake, *J*

Visit [bosterbio.com/anti-occludin-ocln-picoband-trade-antibody-a01246-2-boster.html](https://bosterbio.com/anti-occludin-ocln-picoband-trade-antibody-a01246-2-boster.html) to see all 2 publications.

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