

## Anti-PTCH2 Antibody Picoband®

Catalog Number: A06375-1

### About PTCH2

PTCH2 (patched 2), also known as PTC2, encodes a 1,203-amino acid putative transmembrane protein that is highly homologous to the PTCH product. The Patched-hedgehog signaling pathway is involved in establishing segment polarity and the anterior-posterior orientation of a number of developing appendages. The pathway is conserved from fly to vertebrates and has been implicated in a number of human neoplasms and developmental syndromes. Mutations in the human Patched gene are the basis of the nevoid basal cell carcinoma syndrome. With age, homozygous mutant male mice developed skin lesions consisting of alopecia and epidermal hyperplasia, suggesting a role for Ptch2 in adult epidermal homeostasis via Shh signaling.

### Overview

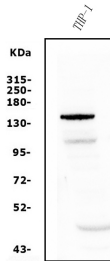
Product Name	Anti-PTCH2 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-PTCH2 Antibody Picoband® catalog # A06375-1. Tested in IF, IHC, ICC, WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, 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	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	Q9Y6C5

### Technical Details

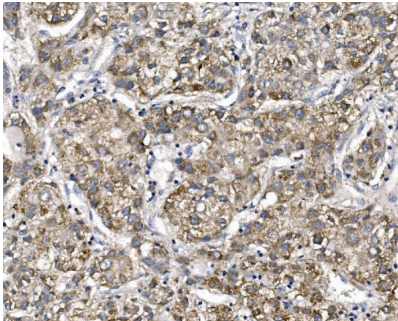
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human PTCH2, identical to the related mouse sequence.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super 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

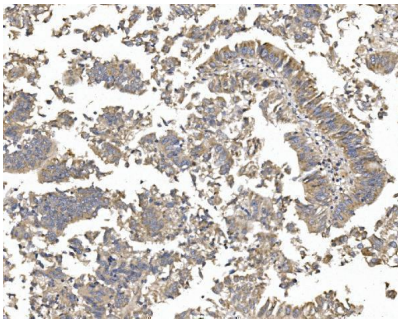
## Anti-PTCH2 Antibody Picoband® (A06375-1) Images



Western blot analysis of PTCH2 using anti-PTCH2 antibody (A06375-1). 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 50ug of sample under reducing conditions. Lane 1: human THP-1 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-PTCH2 antigen affinity purified polyclonal antibody (Catalog # A06375-1) 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 PTCH2 at approximately 150KD. The expected band size for PTCH2 is at 150KD.

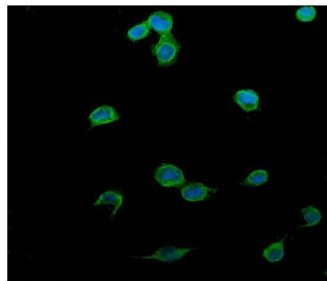


IHC analysis of PTCH2 using anti-PTCH2 antibody (A06375-1). PTCH2 was detected in paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PTCH2 Antibody (A06375-1) 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.



IHC analysis of PTCH2 using anti-PTCH2 antibody (A06375-1). PTCH2 was detected in paraffin-embedded section of human rectal 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-PTCH2 Antibody (A06375-1) 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 PTCH2 using anti-PTCH2 antibody (A06375-1). PTCH2 was detected in immunocytochemical section of U2OS 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-PTCH2 Antibody (A06375-1) 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.

## Submit a product review to [Biocompare.com](https://www.biocompare.com)

Submit a review of this product to [Biocompare.com](https://www.biocompare.com) to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



### Anti-PTCH2 Antibody

For Research Use Only. Not for use in diagnostic procedures.