

## Anti-Renin receptor/ATP6AP2 Antibody Picoband®

Catalog Number: A02665-3

### About ATP6AP2

The renin receptor also known as ATPase H(+)-transporting lysosomal accessory protein 2, or the prorenin receptor, is a protein that in humans is encoded by the ATP6AP2 gene. This gene encodes a protein that is associated with adenosine triphosphatases (ATPases). Proton-translocating ATPases have fundamental roles in energy conservation, secondary active transport, acidification of intracellular compartments, and cellular pH homeostasis. There are three classes of ATPases- F, P, and V. The vacuolar (V-type) ATPases have a transmembrane proton-conducting sector and an extramembrane catalytic sector. The encoded protein has been found associated with the transmembrane sector of the V-type ATPases.

### Overview

Product Name	Anti-Renin receptor/ATP6AP2 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Renin receptor/ATP6AP2 Antibody Picoband® catalog # A02665-3. Tested in Flow Cytometry, IP, IF, ICC, 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	Flow Cytometry, IP, 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	O75787

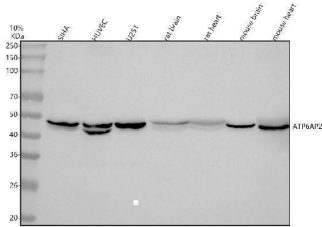
### Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human Renin receptor/ATP6AP2, which shares 100% and 95.8% amino acid (aa) sequence identity with mouse and rat Renin receptor/ATP6AP2, 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.
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.

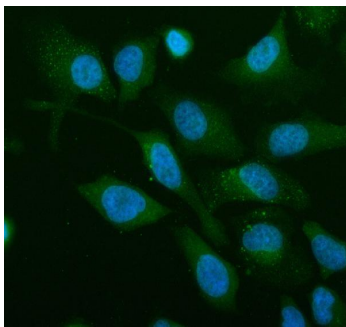
Suggested Dilutions

Western blot, 0.25-0.5 ug/ml, Human, Mouse, Rat  
Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human  
Flow Cytometry (Fixed), 1-3 ug/1x10<sup>6</sup> cells, Human

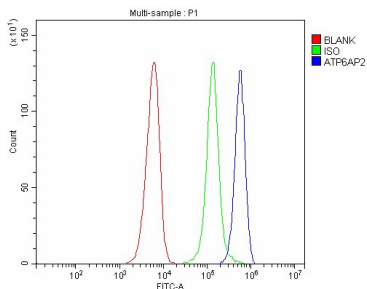
## Anti-Renin receptor/ATP6AP2 Antibody Picoband® (A02665-3) Images



Western blot analysis of Renin receptor/ATP6AP2 using anti-Renin receptor/ATP6AP2 antibody (A02665-3). 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 SiHa whole cell lysates, Lane 2: human HUVEC whole cell lysates, Lane 3: human U251 whole cell lysates, Lane 4: rat brain tissue lysates, Lane 5: rat heart tissue lysates, Lane 6: mouse brain tissue lysates, Lane 7: mouse heart 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-Renin receptor/ATP6AP2 antigen affinity purified polyclonal antibody (Catalog # A02665-3) 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 Renin receptor/ATP6AP2 at approximately 49 kDa. The expected band size for Renin receptor/ATP6AP2 is at 39 kDa.

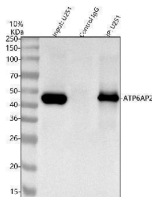


IF analysis of Renin receptor/ATP6AP2 using anti-Renin receptor/ATP6AP2 antibody (A02665-3). Renin receptor/ATP6AP2 was detected in an immunocytochemical section of HELA cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-Renin receptor/ATP6AP2 Antibody (A02665-3) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:500 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 SiHa cells using anti-Renin receptor/ATP6AP2 antibody (A02665-3). Overlay histogram showing SiHa cells stained with A02665-3 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Renin receptor/ATP6AP2 Antibody (A02665-3, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/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.



Immunoprecipitating Renin receptor/ATP6AP2 in U251 whole cell lysate. Western blot analysis of Renin receptor/ATP6AP2 using anti-Renin receptor/ATP6AP2 antibody (A02665-3); Lane 1: U251 whole cell lysates (30ug); Lane 2: Rabbit control IgG instead of anti-Renin receptor/ATP6AP2 antibody in U251 whole cell lysate; Lane 3: anti-Renin receptor/ATP6AP2 antibody (2ug) + U251 whole cell lysate (500ug). After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Renin receptor/ATP6AP2 antigen affinity purified polyclonal antibody (A02665-3) 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 Renin receptor/ATP6AP2 at approximately 45 kDa. The expected band size for Renin receptor/ATP6AP2 is at 39 kDa.

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Anti-Renin receptor/ATP6AP2 Antibody

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