

## Anti-L-Arginine decarboxylase/AZIN2 Antibody Picoband®

Catalog Number: RP1112

### About AZIN2

Antizyme inhibitor 2 (AzI2), also known as arginine decarboxylase (ADC), is an enzyme that in humans is encoded by the AZIN2 gene. The protein encoded by this gene belongs to the antizyme inhibitor family, which plays a role in cell growth and proliferation by maintaining polyamine homeostasis within the cell. Antizyme inhibitors are homologs of ornithine decarboxylase (ODC, the key enzyme in polyamine biosynthesis) that have lost the ability to decarboxylase ornithine; however, retain the ability to bind to antizymes. Antizymes negatively regulate intracellular polyamine levels by binding to ODC and targeting it for degradation, as well as by inhibiting polyamine uptake. Antizyme inhibitors function as positive regulators of polyamine levels by sequestering antizymes and neutralizing their effect. This gene encodes antizyme inhibitor 2, the second member of this gene family. Like antizyme inhibitor 1, antizyme inhibitor 2 interacts with all 3 antizymes and stimulates ODC activity and polyamine uptake. However, unlike antizyme inhibitor 1, which is ubiquitously expressed and localized in the nucleus and cytoplasm, antizyme inhibitor 2 is predominantly expressed in the brain and testis and localized in the endoplasmic reticulum-golgi intermediate compartment. Recent studies indicate that antizyme inhibitor 2 is also expressed in specific cell types in ovaries, adrenal glands and pancreas, and in mast cells. The exact function of this gene is not known, however, available data suggest its role in cell growth, spermiogenesis, vesicular trafficking and secretion.

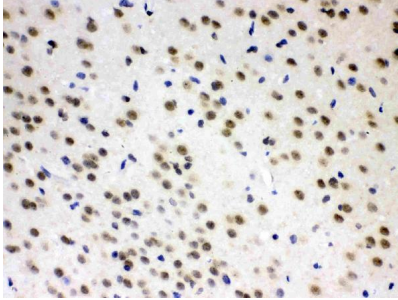
### Overview

|                      |  |
|----------------------|--|
| Product Name         | Anti-L-Arginine decarboxylase/AZIN2 Antibody Picoband®   |
| Reactive Species     | Human, Mouse, Rat  |
| Description          | Boster Bio Anti-L-Arginine decarboxylase/AZIN2 Antibody catalog # RP1112. Tested in 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          | IHC, WB  |
| Clonality            | Polyclonal   |
| Formulation          | Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , and 0.05 mg Na <sub>3</sub> N.<br>*This antibody is supplied in a stabilized formulation.<br>Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required. |
| 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           | Q96A70   |

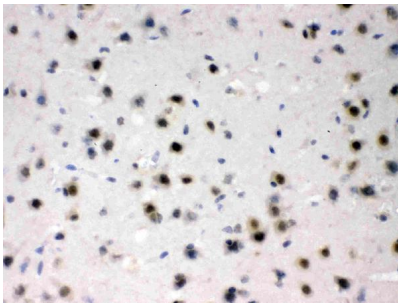
### Technical Details

|                               |  |
|-------------------------------|--|
| Immunogen                     | E. coli-derived human AZIN2 recombinant protein (Position: C111-Q301). Human AZIN2 shares 89.4% amino acid (aa) sequence identity with mouse AZIN2.                              |
| 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<br>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat   |

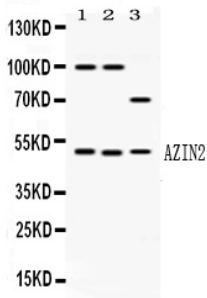
## Anti-L-Arginine decarboxylase/AZIN2 Antibody Picoband® (RP1112) Images



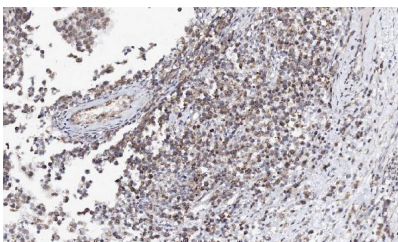
AZIN2 was detected in paraffin-embedded sections of rat brain tissues using rabbit anti-AZIN2 Antigen Affinity purified polyclonal antibody (Catalog # RP1112) at 1 ug/mL. The immunohistochemical section was developed using SABC method (Catalog # SA1022).



AZIN2 was detected in paraffin-embedded sections of mouse brain tissues using rabbit anti-AZIN2 Antigen Affinity purified polyclonal antibody (Catalog # RP1112) at 1 ug/mL. The immunohistochemical section was developed using SABC method (Catalog # SA1022).



Western blot analysis of AZIN2 expression in rat brain extract (lane 1), mouse brain extract (lane 2) and HELA whole cell lysates (lane 3). AZIN2 at 50KD was detected using rabbit anti-AZIN2 Antigen Affinity purified polyclonal antibody (Catalog # RP1112) at 0.5 ug/mL. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1002).



IHC analysis of AZIN2 using anti-AZIN2 antibody (RP1112). AZIN2 was detected in paraffin-embedded section of human testicular cancer tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-AZIN2 Antibody (RP1112) 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.

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-L-Arginine decarboxylase/AZIN2 Antibody

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