

Anti-Angiotensinogen/AGT Antibody Picoband®

Catalog Number: A02103-4

About AGT

AGT(ANGIOTENSINOGEN), also called SERPINA8, is an alpha-2-globulin that is produced constitutively and released into the circulation mainly by the liver. ATG is a member of the serpin family, although it is not known to inhibit other enzymes, unlike most serpins. Angiotensinogen is also known as renin substrate. The AGT gene is mapped on 1q42.2. And the human angiotensinogen gene contains 5 exons. The expression of AGT and enzymes required for its conversion to angiotensin II in human adipose tissue. Mutations in this AGT gene are associated with susceptibility to essential hypertension, and can cause renal tubular dysgenesis, a severe disorder of renal tubular development. Defects in this gene have also been associated with non-familial structural atrial fibrillation, and inflammatory bowel disease.

Overview

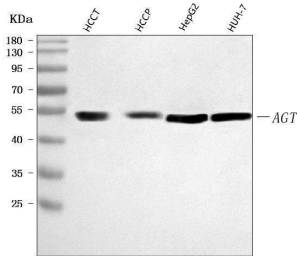
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| Product Name | Anti-Angiotensinogen/AGT Antibody Picoband® |
| Reactive Species | Human |
| Description | Boster Bio Anti-Angiotensinogen/AGT Antibody Picoband® catalog # A02103-4. Tested in ELISA, IHC, WB, Flow Cytometry applications. This antibody 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, IHC, WB |
| Clonality | Polyclonal |
| Formulation | Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ . |
| 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 | P01019 |

Technical Details

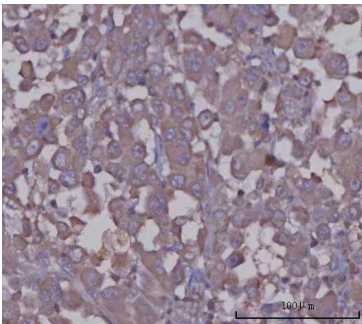
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| Immunogen | E.coli-derived human Angiotensinogen/AGT recombinant protein (Position: D273-R458). |
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated 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 |

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| Concentration | Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml. |
| Purification | Immunogen affinity purified. |
| Suggested Dilutions | Western blot, 0.1-0.25 µg/ml, Human Immunohistochemistry(Paraffin-embedded Section), 2-5 µg/ml, Human Flow Cytometry (Fixed), 1-3 µg/1x10 ⁶ cells, Human ELISA, 0.1-0.5 µg/ml, - |

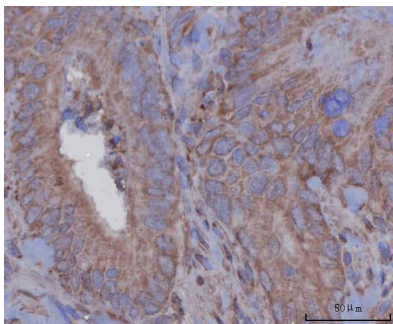
Anti-Angiotensinogen/AGT Antibody Picoband® (A02103-4) Images



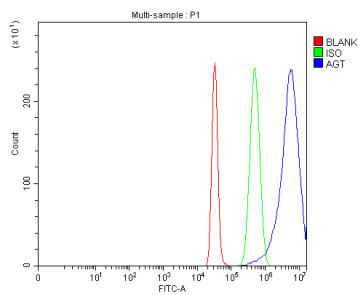
Western blot analysis of Angiotensinogen/AGT using anti-Angiotensinogen/AGT antibody (A02103-4). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human hepatocellular carcinoma tumor tissue (HCCT) lysates, Lane 2: human hepatocellular carcinoma paracancerous tissue (HCCP) lysates, Lane 3: human HepG2 whole cell lysates, Lane 4: human HUH-7 whole cell 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-Angiotensinogen/AGT antigen affinity purified polyclonal antibody (Catalog # A02103-4) at 0.25 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 Angiotensinogen/AGT at approximately 53 kDa. The expected band size for Angiotensinogen/AGT is at 53 kDa.



IHC analysis of Angiotensinogen/AGT using anti-Angiotensinogen/AGT antibody (A02103-4). Angiotensinogen/AGT was detected in a paraffin-embedded section of human lung adenocarcinoma 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-Angiotensinogen/AGT Antibody (A02103-4) 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 Angiotensinogen/AGT using anti-Angiotensinogen/AGT antibody (A02103-4). Angiotensinogen/AGT was detected in a paraffin-embedded section of human rectum adenocarcinoma 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-Angiotensinogen/AGT Antibody (A02103-4) 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.



Flow Cytometry analysis of HepG2 cells using anti-Angiotensinogen/AGT antibody (A02103-4). Overlay histogram showing HepG2 cells stained with A02103-4 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-Angiotensinogen/AGT Antibody (A02103-4, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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Anti-Angiotensinogen/AGT Antibody

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