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antibody and ELISA experts

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Anti-PARN Antibody Picoband™

Catalog Number: A01501-2

About PARN

Poly (A)-specific ribonuclease (PARN), also known as polyadenylate-specific ribonuclease or deadenylating nuclease (DAN), is an enzyme that in humans is encoded by the PARN gene. The protein encoded by this gene is a 3'-exoribonuclease, with similarity to the RNase D family of 3'-exonucleases. It prefers poly (A) as the substrate, hence, efficiently degrades poly (A) tails of mRNAs. Exonucleolytic degradation of the poly (A) tail is often the first step in the decay of eukaryotic mRNAs. This protein is also involved in silencing of certain maternal mRNAs during oocyte maturation and early embryonic development, as well as in nonsense-mediated decay (NMD) of mRNAs that contain premature stop codons.

Overview

Product Name	Anti-PARN Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-PARN Antibody Picoband™ catalog # A01501-2. Tested in ELISA, Flow Cytometry, IF, IHC, IHC-F, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, Flow Cytometry, IF, IHC, IHC-F, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na_2HPO_4, 0.05mg NaN_3.
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	O95453

Technical Details

Immunogen	E. coli-derived human PARN recombinant protein (Position: M1-Y301).
Predicted Reactive Species	Human
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.

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Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Western blot, 0.1-0.5ug/ml Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml Immunohistochemistry (Frozen Section), 0.5-1ug/ml Immunocytochemistry/Immunofluorescence, 2ug/ml Flow Cytometry, 1-3ug/1x10^6 cells Direct ELISA, 0.1-0.5ug/ml

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Anti-PARN Antibody Picoband™ (A01501-2) Images

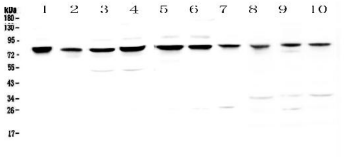

Figure 1. Western blot analysis of PARN using anti-PARN antibody (A01501-2).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: human Hela whole cell lysates,
Lane 2: human placenta tissue lysates,
Lane 3: human COLO-320 whole cell lysates,
Lane 4: human HepG2 whole cell lysates,
Lane 5: human PANC-1 whole cell lysates,
Lane 6: human SGC-7901 whole cell lysates,
Lane 7: human MDA-MB-231 whole cell lysates,
Lane 8: rat kidney tissue lysates,
Lane 9: mouse heart tissue lysates,
Lane 10: mouse kidney tissue 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-PARN antigen affinity purified polyclonal antibody (Catalog # A01501-2) 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 PARN at approximately 78KD. The expected band size for PARN is at 73KD.

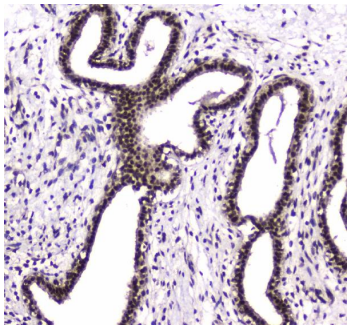

Figure 2. IHC analysis of PARN using anti-PARN antibody (A01501-2).
PARN was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PARN Antibody (A01501-2) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Figure 3. IHC analysis of PARN using anti-PARN antibody (A01501-2).
PARN was detected in paraffin-embedded section of mouse small intestine tissue. 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-PARN Antibody (A01501-2) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary

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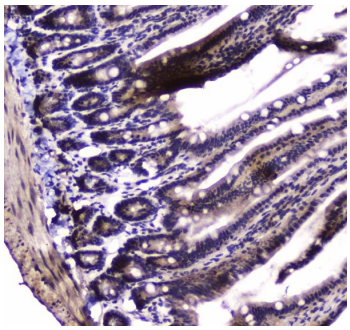

antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

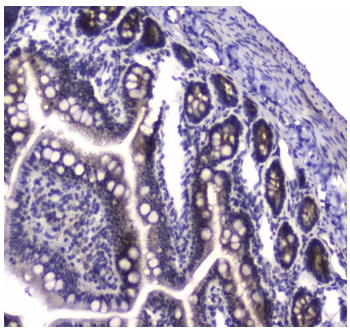

Figure 4. IHC analysis of PARN using anti-PARN antibody (A01501-2).
PARN was detected in paraffin-embedded section of rat small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-PARN Antibody (A01501-2) 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 Strepavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

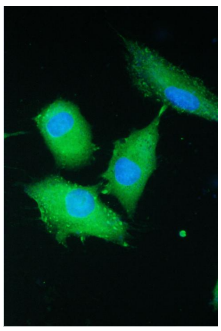

Figure 5. IF analysis of PARN using anti-PARN antibody (A01501-2).
PARN was detected in immunocytochemical section of A549 cell. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-PARN Antibody (A01501-2) 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.

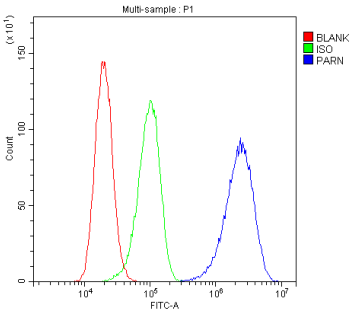

Figure 6. Flow Cytometry analysis of A431 cells using anti-PARN antibody (A01501-2).
Overlay histogram showing A431 cells stained with A01501-2 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PARN Antibody (A01501-2,1ug/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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