

Anti-Pin1 Antibody Picoband®

Catalog Number: PB9316

About PIN1

Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1, also called DOD, is an enzyme that in humans is encoded by the PIN1 gene. It is mapped to 19p13.2. The enzyme binds to a subset of proteins and thus plays a role as a post phospho PIN1rol in regulating protein function. Studies have shown that the deregulation of PIN1 may play a pivotal role in various diseases. Notably, the up-regulation of PIN1 may be implicated in certain cancers, and the down-regulation of Pin1 may be implicated in Alzheimer's disease. Inhibitors of PIN1 may have therapeutic implications for cancer and immune disorders. PIN1 activity regulates the outcome of proline-directed kinase (e.g. MAPK, CDK or GSK3) signalling and consequently regulates cell proliferation (in part through control of cyclin D1 levels and stability) and cell survival. PIN1 also has an essential role in maintaining cell proliferation and regulating cyclin D1 function.

Overview

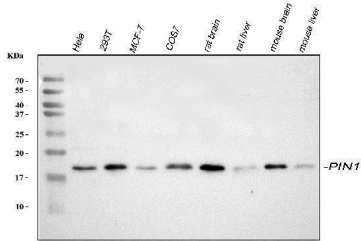
Product Name	Anti-Pin1 Antibody Picoband®
Reactive Species	Human, Monkey, Mouse, Rat
Description	Boster Bio Anti-Pin1 Antibody Picoband® catalog # PB9316. Tested in Flow Cytometry, ICC/IF, IHC, WB applications. This antibody reacts with Human, Monkey, Mouse, Rat. The brand Picoband indicates this is 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, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
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	Q13526

Technical Details

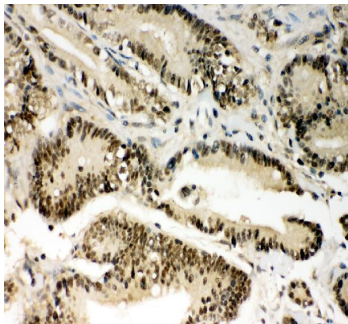
Immunogen	E.coli-derived human Pin1 recombinant protein (Position: M1-E163). Human Pin1 shares 95% amino acid (aa) sequence identity with mouse Pin1.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity 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, Monkey, Mouse, Rat Immunohistochemistry (Paraffin-embedded Section), 2-5ug/ml, Human Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Human

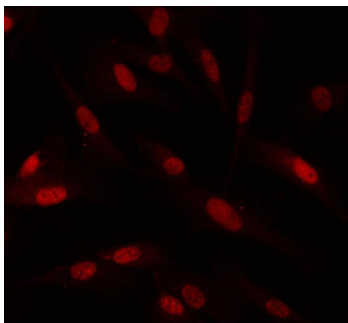
Anti-Pin1 Antibody Picoband® (PB9316) Images



Western blot analysis of PIN1 using anti-PIN1 antibody (PB9316). 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 HeLa whole cell lysates, Lane 2: human 293T whole cell lysates, Lane 3: human MCF-7 whole cell lysates, Lane 4: monkey COS-7 whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: rat liver tissue lysates, Lane 7: mouse brain tissue lysates, Lane 8: mouse liver 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-PIN1 antigen affinity purified polyclonal antibody (Catalog # PB9316) 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 PIN1 at approximately 18 kDa. The expected band size for PIN1 is at 18 kDa.

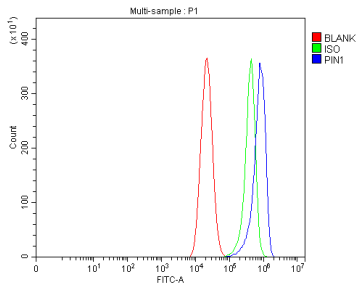


IHC analysis of PIN1 using anti-PIN1 antibody (PB9316). PIN1 was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-PIN1 Antibody (PB9316) 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.



IF analysis of PIN1 using anti-PIN1 antibody (PB9316). PIN1 was detected in an immunocytochemical section of U87 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-PIN1 Antibody (PB9316) overnight at 4°C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37°C. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

Flow Cytometry analysis of CACO-2 cells using anti-PIN1 antibody (PB9316). Overlay histogram showing CACO-2 cells stained with PB9316 (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-PIN1 Antibody (PB9316, 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 without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

Submit a product review to Biocompare.com

Submit a review of this product to 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-Pin1 Antibody

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