

Datasheet for 600-401-A20**PIN1 Antibody****Overview**

Description:	Anti-PIN1 (RABBIT) Antibody - 600-401-A20
Item No.:	600-401-A20
Size:	100 µg
Applications:	ELISA, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Pin1 (peptidylprolyl cis/trans isomerase NIMA-interacting 1 protein) is an essential peptidylprolyl isomerase that regulates mitosis, presumably by interacting with NIMA and attenuating its mitosis-promoting activity. Pin1 displays a preference for an acidic residue N-terminal to the isomerized proline bond and also catalyzes pSer/Thr-Pro cis/trans isomerizations. Pin1 shows a nuclear localization.
Synonyms:	rabbit anti-PIN1 antibody, PIN-1, PIN 1, Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1 antibody, Peptidyl-prolyl cis-trans isomerase Pin1, Prolyl isomerase antibody, Protein (peptidylprolyl cis/trans isomerase) NIMA interacting 1 antibody, Protein NIMA interacting 1 antibody, Rotamase Pin1 antibody, PPlase Pin1 antibody
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PIN1
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal sequence of human Pin1.

Purity/Specificity: This affinity purified antibody is directed against human Pin1. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with Pin1 from human, dog, bovine and monkey based on a 100% homology with the immunizing sequence. Expect partial reactivity with Pin1 from mouse and rat sources based on 92% sequence homologies. Reactivity against homologues from other sources is not known.

Relevant Links:

- [UniProtKB - Q13526](#)
- [NCBI - 5453898](#)
- [GenelD - 5300](#)

Application Details

Tested Applications: ELISA, IHC, WB

Application Note: This affinity purified antibody has been tested for use in ELISA, Immunohistochemistry, and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 18 kDa in size corresponding to Pin1 by western blotting in the appropriate cell lysate or extract. Lysates from 3T3, Jurkat, 293 or HeLa cells, as well as HeLa nuclear extract, are recommended for use as positive controls.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:2,500 - 1:10,000

IHC: 5µg/mL

IP: 1:100

WB: 1:500 - 1:3,000

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1.1 mg/mL by UV absorbance at 280 nm

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Preservative: 0.01% (w/v) Sodium Azide

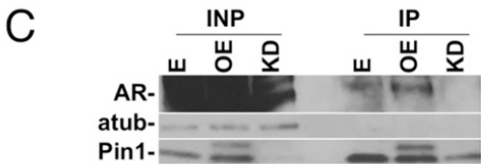
Stabilizer: None

Shipping & Handling

Shipping Condition: Dry Ice

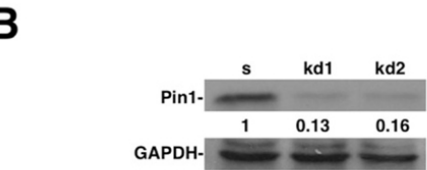
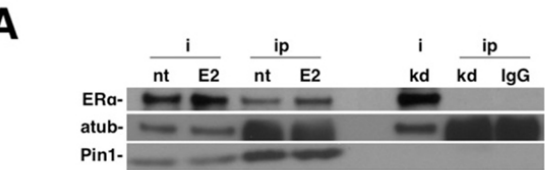
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



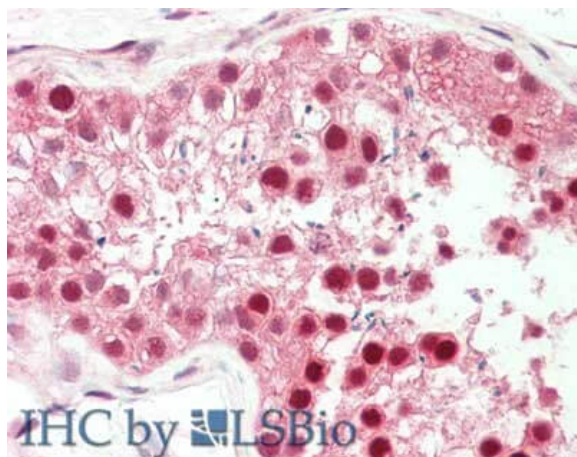
Immunoprecipitation

(C) Pin1 interacts with AR in vivo. Cells were immunoprecipitated with anti-Pin1 antibody, analyzed by western blot with anti-AR antibody. The membrane was normalized with α-tubulin antibody. E, empty vector; OE, overexpression of Pin1; KD, Pin1 knockdown. Fig 1. PMID: 22894932



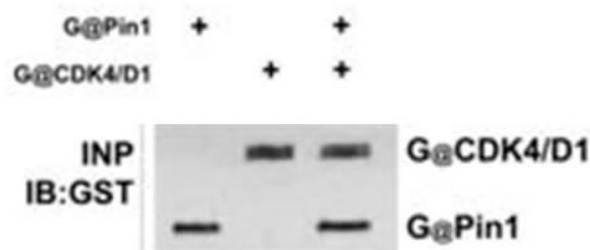
Western Blot

A) Serum-starved cells were treated with estradiol (E2) or ethanol for 45'. Cells were harvested and pellets immunoprecipitated with anti-Pin1 and analyzed by Western blot with anti-ERα antibody. Pin1 kd cells or IgG were used as a negative control. B) MCF7 cells were transfected with shRNA scramble (SCR) or shRNA Pin1 (kd1 and kd2), and Pin1 protein level was detected by immunoblotting. GAPDH was used as the load control. Quantification represents the ratio between the Pin1 and GAPDH proteins and normalized to scrambled cells. Fig 1. PMID: 23390529



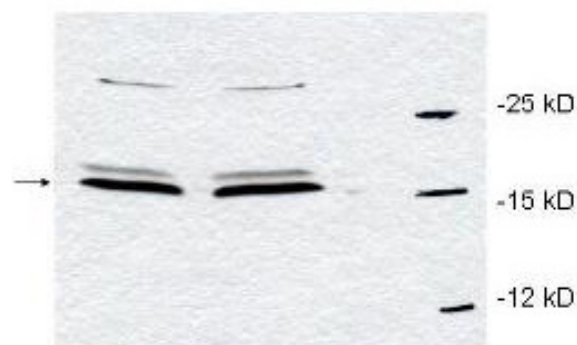
Immunohistochemistry

Immunohistochemistry of rabbit anti-PIN1 antibody. Tissue: testis. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Anti-PIN1 at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: PIN-1 as precipitated red signal with hematoxylin purple nuclear counterstain.



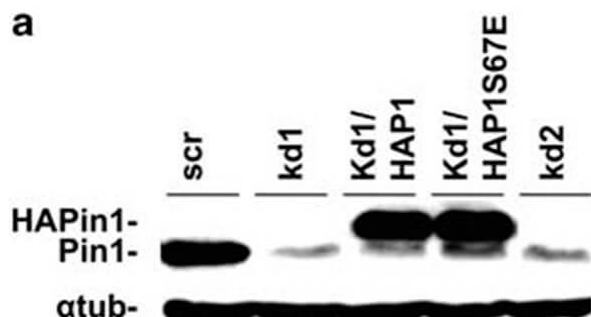
Western Blot

Immunoprecipitation of Rabbit anti-PIN1 antibody. Lane 1: T98G cells incubated with GST-Pin1. Lane 2: T98G cells incubated with GST-CDK4/cyclinD1. Lane 3: T98G cells incubated with GST-Pin1 and GST-CDK4/cyclinD1. Immunoprecipitated with pRb antibody. Load: 25 µg per lane. Primary antibody: anti-GST 1:400 for overnight at 4°C. Secondary antibody: IRDye800™ secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Fig 5b. PMID: 22322860



Western Blot

Western blot using Rockland's affinity purified anti-Pin1 antibody to detect endogenous Pin1 in HeLa whole cell lysates. The sample was run in duplicate. A band representing Pin1 is indicated by the arrowhead. Cell lysates were electrophoresed using a straight 15% polyacrylamide gel, followed by transfer to nitrocellulose. The membrane was probed with the primary antibody at a 1:700 dilution. A 1:5,000 dilution of HRP Gt-a-Rabbit IgG (611-103-122) was used with a 15 sec exposure time. Personal Communication, L. D'agostino and A. Giordano, SHRO, Philadelphia, PA.



Western Blot

Western Blot of Rabbit anti-PIN1 antibody. Lane 1: T98G cells treated with scrambled (scr). Lane 2: T98G cells treated with PIN1 kd1 shRNA. Lane 3: T98G cells treated with PIN1-overexpressing plasmid HAP1. Lane 4: T98G cells treated with PIN1-overexpressing plasmid HAP1S67E. Lane 5: T98G cells treated with PIN1 kd2 shRNA. Load: 25 µg per lane. Primary antibody: PIN 1 antibody at 1:400 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted size: 18 kDa for PIN-1. Other band(s): normalized with a-tubulin (α-tub) antibody. Fig 1a. PMID: 22322860

References

- Lucchetti C et al. The prolyl isomerase Pin1 acts synergistically with CDK2 to regulate the basal activity of estrogen receptor α in breast cancer. *PLoS One* (2013)
- Rizzolio F et al. Dissecting Pin1 and phospho-pRb regulation. *J Cell Physiol.* (2013)
- Rizzolio F et al. Retinoblastoma tumor-suppressor protein phosphorylation and inactivation depend on direct interaction with Pin1. *Cell Death Differ.* (2012)
- La Montagna R et al. Androgen receptor serine 81 mediates Pin1 interaction and activity. *Cell Cycle* (2012)

Disclaimer

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