

For Research Use Only

# PIN1 Recombinant antibody

Catalog Number: 81857-1-RR

Featured Product



## Basic Information

Catalog Number:

81857-1-RR

Size:

1000 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG0767

GenBank Accession Number:

BC002899

GeneID (NCBI):

5300

UNIPROT ID:

Q13526

Full Name:

peptidylprolyl cis/trans isomerase,  
NIMA-interacting 1

Calculated MW:

18 kDa

Observed MW:

18 kDa

Purification Method:

Protein A purification

CloneNo.:

5N20

Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total  
protein lysate

IHC 1:500-1:2000

IF/ICC 1:200-1:800

## Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Species Specificity:

human, mouse, rat, pig

**Note-IHC: suggested antigen retrieval with  
TE buffer pH 9.0; (\*) Alternatively, antigen  
retrieval may be performed with citrate  
buffer pH 6.0**

Positive Controls:

WB : HEK-293 cells, HeLa cells, Jurkat cells, K-562 cells,  
mouse brain tissue, rat brain tissue, pig brain tissue

IP : HepG2 cells, NIH/3T3 cells

IHC : human pancreas cancer tissue,

IF/ICC : NIH/3T3 cells,

## Background Information

PIN1 (Peptidyl-prolyl cis-trans isomerase NIMA-interacting 1) is essential for mitosis progression in yeast cells and is hypothesized to perform the same role in mammalian cells. It might regulate cellular processes distinct from the cell cycle itself, such as terminal differentiation through a modulation of differentiation-specific gene expression (PMID:20801874). It colocalizes with NEK6 in the nucleus. Pin1 inhibition simultaneously blocks multiple cancer pathways, disrupts the desmoplastic and immunosuppressive TME, and upregulates PD-L1 and ENT1, rendering pancreatic ductal adenocarcinoma (PDAC) eradicable by immunochemotherapy (PMID: 34388391).

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

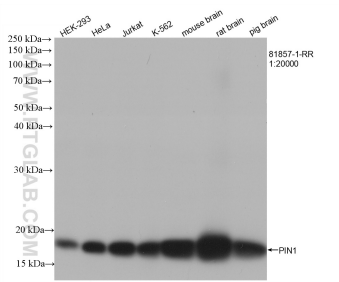
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

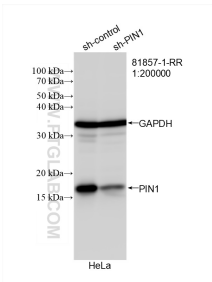
W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

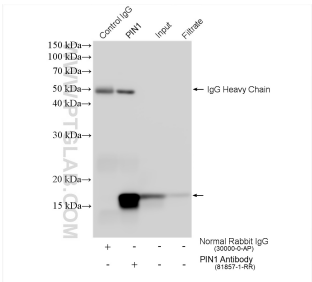
Selected Validation Data



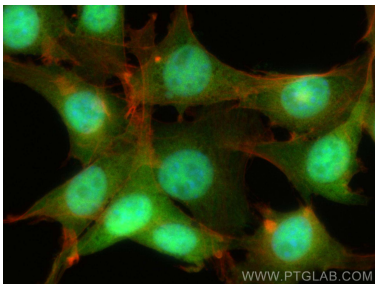
Various lysates were subjected to SDS PAGE followed by western blot with 81857-1-RR (PIN1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



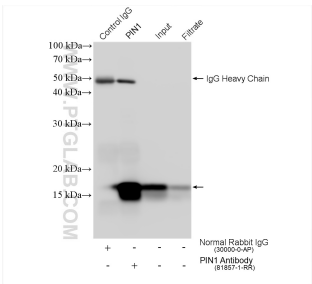
WB result of PIN1 antibody (81857-1-RR; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PIN1 transfected HeLa cells.



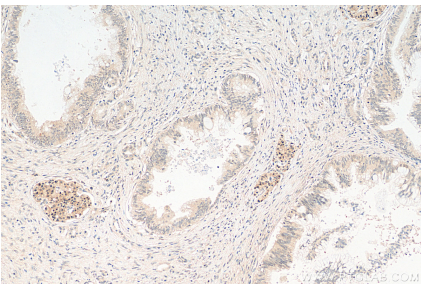
IP result of anti-PIN1 (IP:81857-1-RR, 4ug; Detection:81857-1-RR 1:20000) with HepG2 cells lysate 1920 ug.



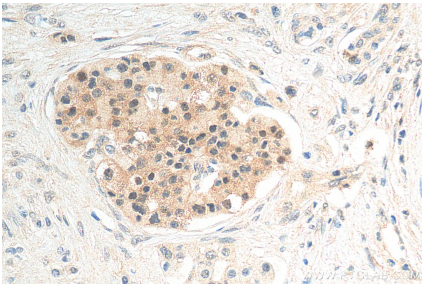
Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using PIN1 antibody (81857-1-RR, Clone: 5N20 ) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



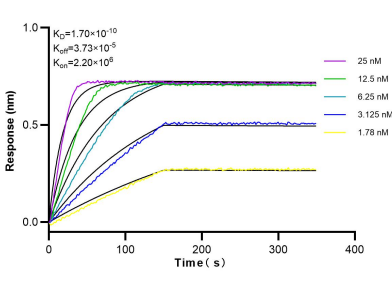
IP result of anti-PIN1 (IP:81857-1-RR, 4ug; Detection:81857-1-RR 1:20000) with NIH/3T3 cells lysate 1120 ug.



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 81857-1-RR (PIN1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 81857-1-RR (PIN1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 81857-1-RR against Human PIN1 were performed. The affinity constant is 0.17 nM.