

For Research Use Only

# PTPN1/PTP1B Polyclonal antibody

Catalog Number: 11334-1-AP

Featured Product

39 Publications



## Basic Information

### Catalog Number:

11334-1-AP

### Size:

1000 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG1878

### GenBank Accession Number:

BC015660

### GeneID (NCBI):

5770

### UNIPROT ID:

P18031

### Full Name:

protein tyrosine phosphatase, non-receptor type 1

### Calculated MW:

435 aa, 50 kDa

### Observed MW:

45-55 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:10000

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

IHC 1:20-1:200

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, monkey

### Positive Controls:

WB : Sp2/0 cells, HeLa cells, mouse liver tissue, THP-1 cells, Jurkat cells, C6 cells, NIH/3T3 cells, rat liver tissue, mouse placenta tissue

IP : A431 cells,

IHC : human prostate cancer tissue,

IF/ICC : BxPC-3 cells,

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

## Background Information

PTPN1 (protein tyrosine phosphatase, non-receptor type 1) is also named as PTP1B or PTP-1B, and belongs to the protein-tyrosine phosphatase family and non-receptor class 1 subfamily. PTPN1 is involved in the regulation of several important physiological pathways, which regulates both INS and leptin signaling, and interacts with the epidermal and platelet-derived growth factor receptors (PMID: 20101100). The gene might harbor variants influencing susceptibility to INS resistance and type 2 diabetes (PMID:15919813). The molecular mass of PTPN1 is 50 kDa, but sometimes some truncated forms can be detected as 48, 46, 39, 37 kDa due to non-specific proteolytic cleavage of PTP1B in different cells (PMID: 18253097).

## Notable Publications

Author	Pubmed ID	Journal	Application
Shohei Takaoka	34646989	iScience	WB
Jianzhi Wu	34566665	Front Pharmacol	WB
Lei Yang	31711802	Toxicol Lett	WB

## 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:

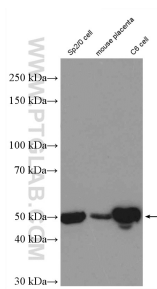
T: 4006900926

E: Proteintech-CN@ptglab.com

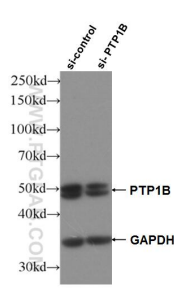
W: ptgcn.com

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

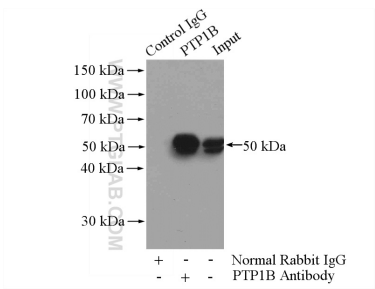
Selected Validation Data



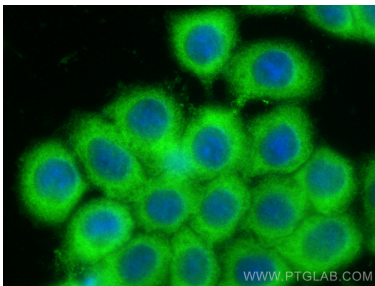
Sp2/0 cells were subjected to SDS PAGE followed by western blot with 11334-1-AP (PTP1B antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



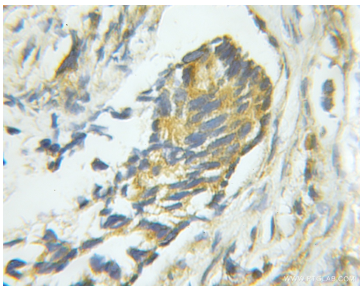
WB result of PTP1B antibody (11334-1-AP; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PTP1B transfected Jurkat cells.



IP result of anti-PTP1B (IP:11334-1-AP, 4ug; Detection:11334-1-AP 1:500) with A431 cells lysate 2400ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed BxPC-3 cells using PTP1B antibody (11334-1-AP) at dilution of 1:200 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).



Immunohistochemical analysis of paraffin-embedded human prostate cancer using 11334-1-AP (PTP1B antibody) at dilution of 1:50 (under 10x lens).