

## Summary

<b>Production Name</b>	PTPN1 Mouse Monoclonal Antibody
<b>Description</b>	Mouse Monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	WB,IHC,ICC,FC,ELISA
<b>Reactivity</b>	Human

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	Mouse IgG1
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Purified antibody in PBS with 0.05% sodium azide.
<b>Purification</b>	Affinity Purification

## Immunogen

<b>Gene Name</b>	PTPN1
<b>Alternative Names</b>	PTP1B
<b>Gene ID</b>	5770.0
<b>SwissProt ID</b>	P18031.Purified recombinant fragment of human PTPN1 (AA: 40-246) expressed in E. Coli.

## Application

<b>Dilution Ratio</b>	WB:1:500-1:2000,IHC:1:200-1:1000,ICC:1:200-1:1000,FC:1:200-1:400,ELISA:1:10000
<b>Molecular Weight</b>	50kDa

## Background

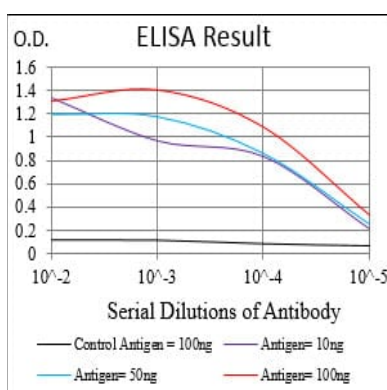
**Product Name: PTPN1 Mouse Monoclonal Antibody**  
**Catalog #: AMM81390**



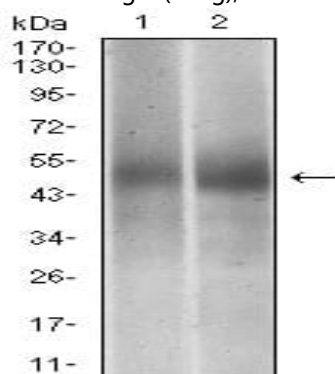
The protein encoded by this gene is the founding member of the protein tyrosine phosphatase (PTP) family, which was isolated and identified based on its enzymatic activity and amino acid sequence. PTPs catalyze the hydrolysis of the phosphate monoesters specifically on tyrosine residues. Members of the PTP family share a highly conserved catalytic motif, which is essential for the catalytic activity. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP has been shown to act as a negative regulator of insulin signaling by dephosphorylating the phosphotyrosine residues of insulin receptor kinase. This PTP was also reported to dephosphorylate epidermal growth factor receptor kinase, as well as JAK2 and TYK2 kinases, which implicated the role of this PTP in cell growth control, and cell response to interferon stimulation. Two transcript variants encoding different isoforms have been found for this gene.

## Research Area

## Image Data

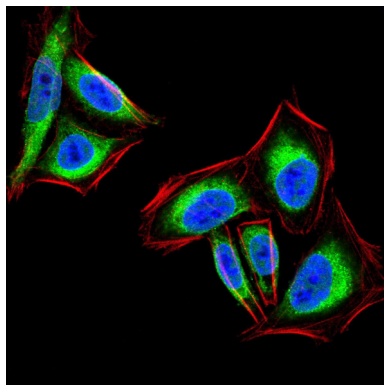


Black line: Control Antigen (100 ng); Purple line: Antigen(10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng);

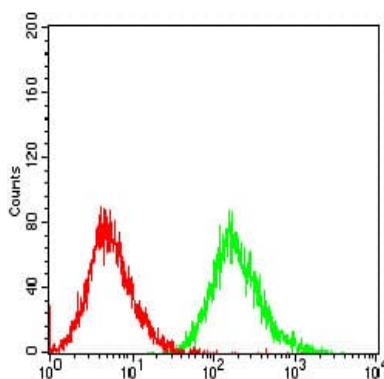


Western blot analysis using PTPN1 mouse mAb against Jurkat (1), MCF-7 (2) cell lysate.

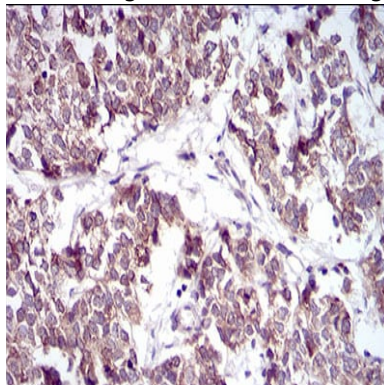
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Immunofluorescence analysis of HeLa cells using PTPN1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)



Flow cytometric analysis of Jurkat cells using PTPN1 mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human bladder cancer tissues using PTPN1 mouse mAb with DAB staining.

## Note

For research use only.