

Product Name: PTPN1 Mouse Monoclonal Antibody**Catalog #: AMM81408**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,ELISA,FC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide.
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	50kDa

Antigen Information

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

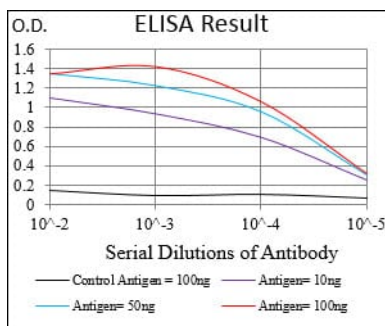
Background

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

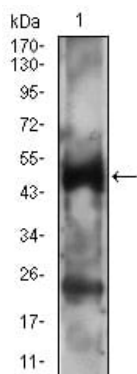
essential for the catalytic activity. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP has been shown to act as a negative regulator of insulin signaling by dephosphorylating 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

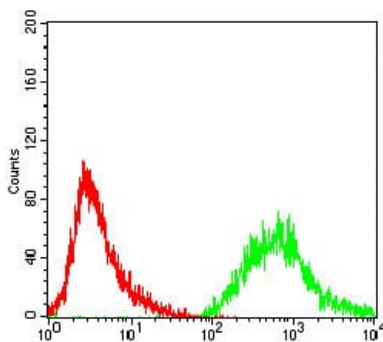
Image Data



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 A431 cell lysate.



Flow cytometric analysis of A431 cells using PTPN1 mouse mAb (green) and negative control (red).