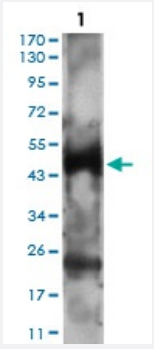
# PTPN1 monoclonal antibody, clone 4F11B9

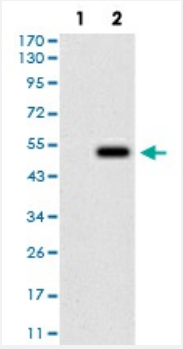
Catalog # MAB16642 Size 100 ug

## Applications



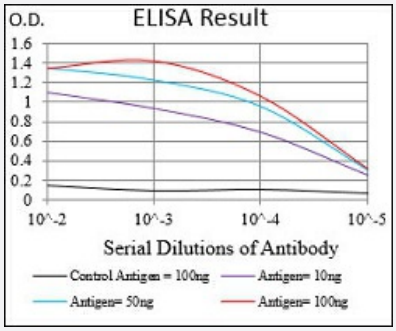

### Western Blot (Cell lysate)

Western blot analysis using PTPN1 monoclonal antibody against A431 cell lysate.



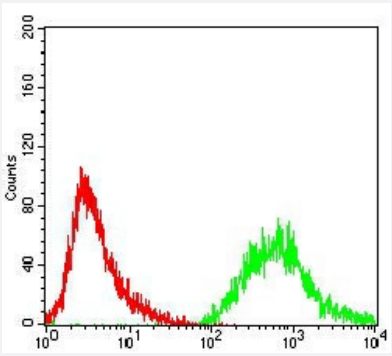

### Western Blot (Transfected lysate)

Western blot analysis of Lane 1: HEK293 cell; Lane 2: PTPN1-hIgGFc transfected HEK293 cell with PTPN1 monoclonal antibody.




### Enzyme-linked Immunoabsorbent Assay

ELISA analysis of PTPN1 monoclonal antibody, clone 4F11B9.




## Flow Cytometry

Flow cytometric analysis of A431 cells with PTPN1 monoclonal antibody (green) and negative control (red).

## Specification

| | |
|---|---|
| **Product Description** | Mouse monoclonal antibody raised against recombinant human PTPN1. |
| **Immunogen** | Recombinant protein corresponding to amino acid 40-246 of human PTPN1 from *E. coli*. |
| **Host** | Mouse |
| **Theoretical MW (kDa)** | 50 |
| **Reactivity** | Human |
| **Form** | Liquid |
| **Isotype** | IgG1 |
| **Recommend Usage** | ELISA (1:10000)<br>Western Blot (1:500-1:2000)<br>Flow Cytometry (1:200-1:400)<br>The optimal working dilution should be determined by the end user. |
| **Storage Buffer** | In PBS (0.05% sodium azide). |
| **Storage Instruction** | Store at 4°C. For long term storage store at -20°C.<br>Aliquot to avoid repeated freezing and thawing. |
| **Note** | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only. |

## Applications

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- Western Blot (Transfected lysate)

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- Enzyme-linked Immunoabsorbent Assay

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- Flow Cytometry

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## Gene Info — PTPN1

| | |
|---|---|
| **Entrez GeneID** | 5770 |
| **Gene Name** | PTPN1 |
| **Gene Alias** | PTP1B |
| **Gene Description** | protein tyrosine phosphatase, non-receptor type 1 |
| **Omim ID** | 176885 609830 |
| **Gene Ontology** | Hyperlink |
| **Gene Summary** | 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. [provided by RefSeq |
| **Other Designations** | OTTHUMP00000031266\|non-receptor tyrosine phosphatase 1\|protein tyrosine phosphatase 1B\|protein tyrosine phosphatase, placental |

## Pathway

- Adherens junction
- Insulin signaling pathway

## Disease

- Albuminuria
- Alzheimer disease
- Arteriosclerosis
- Atherosclerosis
- Atrophy
- Calcinosis
- Cardiomyopathy
- Cardiovascular Diseases
- Cerebrovascular Disorders
- Coronary Artery Disease
- Coronary Disease
- Diabetes Complications
- Diabetes Mellitus
- Diabetic Angiopathies
- Diabetic Retinopathy
- Dyslipidemias
- Genetic Predisposition to Disease
- Glucose Intolerance
- Helicobacter Infections
- Hypertension
- Insulin Resistance
- Kidney Failure
- Lymphoma
- Metabolic Syndrome X
- Neoplasms

- Noonan Syndrome
- Obesity
- Osteoporosis
- Ovarian Neoplasms
- Peripheral Vascular Diseases
- Pulmonary Valve Stenosis
- Stomach Neoplasms
- Syndrome