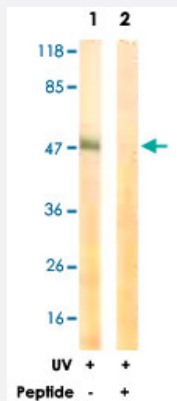


PTPN1 polyclonal antibody

Catalog # PAB18287 Size 100 ug

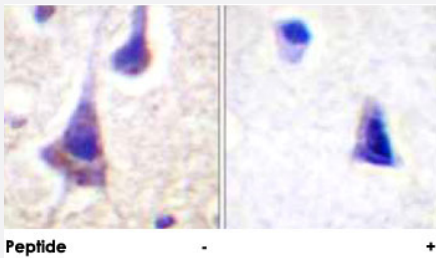
Applications



Western Blot (Cell lysate)

Western blot analysis of extracts from COS-7 cells, treated with UV (30 mins), using PTPN1 polyclonal antibody (Cat # PAB18287).

Peptide "+" means "peptide blocking".



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human brain tissue using PTPN1 polyclonal antibody (Cat # PAB18287).

Peptide "+" means "peptide blocking".

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of PTPN1.
Immunogen	A synthetic peptide corresponding to residues surrounding S50 of human PTPN1.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to PTPN1.
Form	Liquid

Purification	Affinity purification
Concentration	1 mg/mL
Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) ELISA (1:20000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of extracts from COS-7 cells, treated with UV (30 mins), using PTPN1 polyclonal antibody (Cat # PAB18287).

Peptide "+" means "peptide blocking".

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human brain tissue using PTPN1 polyclonal antibody (Cat # PAB18287).

Peptide "+" means "peptide blocking".

- Enzyme-linked Immunoabsorbent Assay

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

Publication Reference

- [Protein-tyrosine phosphatase-1B \(PTP1B\) mediates the anti-migratory actions of Sprouty.](#)

Yigzaw Y, Poppleton HM, Sreejayan N, Hassid A, Patel TB.

The Journal of Biological Chemistry 2003 Jan; 278(1):284.

Application: IP, WB-Tr, Human, HeLa cells

- [PTP1B modulates the association of beta-catenin with N-cadherin through binding to an adjacent and partially overlapping target site.](#)

Xu G, Arregui C, Lilien J, Balsamo J.

The Journal of Biological Chemistry 2002 Dec; 277(51):49989.

Application: ELISA, WB-Ce, WB-Tr, Chicken, Mouse, E8 neural retina, L cells

- [Imaging sites of receptor dephosphorylation by PTP1B on the surface of the endoplasmic reticulum.](#)

Haj FG, Verveer PJ, Squire A, Neel BG, Bastiaens PI.

Science 2002 Mar; 295(5560):1708.

Application: IF, Mouse, Mouse fibroblasts

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](#)