

Anti-PTP1B Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

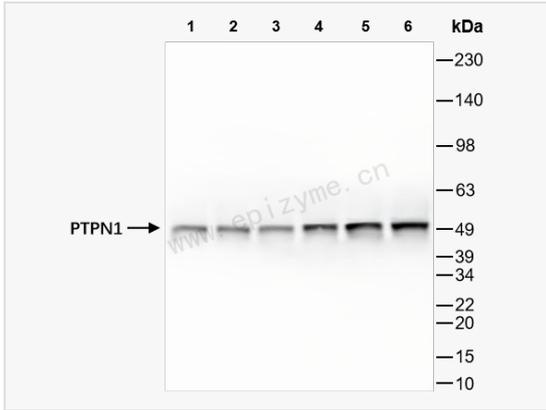
Catalog # R015807

Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, ELISA
Reactivity	Human
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	99P95D79
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human PTPN1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-PTP1B Rabbit mAb [99P95D79] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	PTP1B; PTPN1; Tyrosine-protein phosphatase non-receptor type 1; Protein-tyrosine phosphatase 1B; PTP-1B.
Calculated MW	Calculated MW: 50 kDa; Observed MW: 50 kDa
Uniprot ID	P18031, P35821, P20417
Gene ID	5770, 19246, 24697
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. [provided by RefSeq, Jul 2013]
Cellular Location	Endoplasmic reticulum membrane.Peripheral membrane protein.Cytoplasmic side.Interacts with EPHA3 at the cell membrane..
Tissue Location	Expressed in keratinocytes (at protein level).



Western Blot - Anti-PTPN1 Rabbit mAb [99P95D79]

All lanes: R015807 at 1:1,000 dilution

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lane 4: 293T (Human embryonic kidney cell) whole cell lysates

Lane 5: K562 (Human chronic myeloid leukemia cell) whole cell lysates

Lane 6: SH-SY5Y (Human neuroblastoma epithelial cell) whole cell lysates

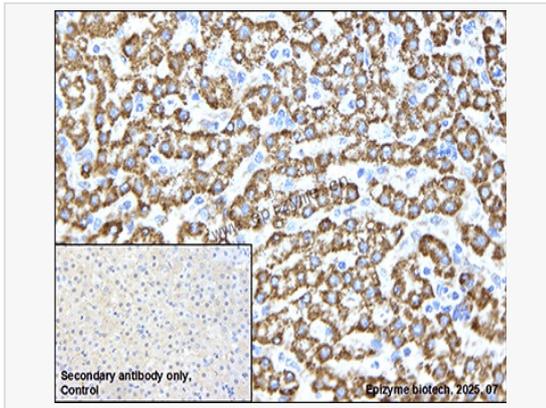
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 50 kDa

Observed band size: 50 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-PTPN1 Rabbit mAb [99P95D79]

Sample: Paraformaldehyde-fixed, paraffin embedded human hepatoma tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

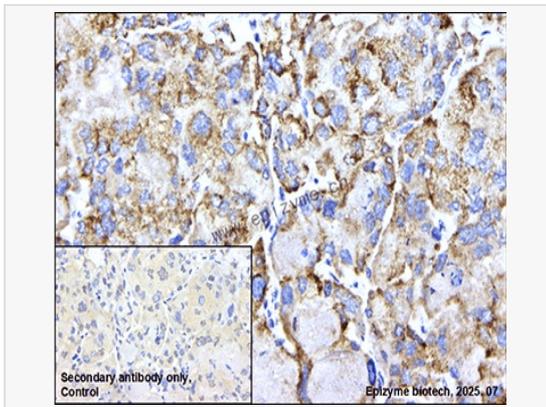
Primary antibody: R015807 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunohistochemistry - Anti-PTPN1 Rabbit mAb [99P95D79]

Sample: Paraformaldehyde-fixed, paraffin embedded human ovarian cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

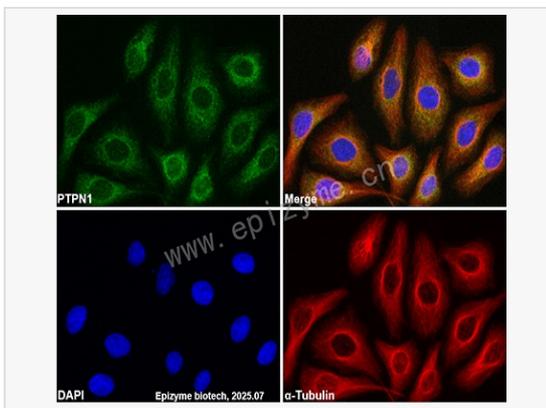
Primary antibody: R015807 at 1:200 dilution

Secondary antibody: Goat Anti-Rabbit IgG (H+L), HRP conjugated at 1:1,000 dilution
DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.



Immunofluorescence - Anti-PTPN1 Rabbit mAb [99P95D79]

Sample: HeLa cells

The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.

Primary antibodies: R015807 at 1:100 dilution and α -tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution

Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)

Nuclei were stained with DAPI (shown in blue).