

Catalog No.: A1590 7 Publications



Basic Information

Observed MW 50kDa

Calculated MW 50kDa

Category Primary antibody

Applications WB,IF/ICC,ELISA

Cross-Reactivity Human, Mouse, Rat

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 phosphotryosine 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.

Recommended Dilutions

WB	1:500 - 1:2000
IF/ICC	1:50 - 1:200
ELISA	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID 5770

Swiss Prot P18031

Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms PTP1B; PTPN1

Contact

2	400-999-6126
\mathbf{X}	cn.market@abclonal.com.cn
€	www.abclonal.com.cn

Product Information

Source Rabbit **lsotype** IgG Purification Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS containing 50% glycerol, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Validation Data



Western blot analysis of various lysates using PTPN1 Rabbit pAb (A1590) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 90s.



Immunofluorescence analysis of U2OS cells using PTPN1 Rabbit pAb (A1590) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.