

Catalog No.: A1590 7 Publications



Basic Information

Observed MW 50kDa

Calculated MW 50kDa

Category Primary antibody

Applications ELISA,WB,IF/ICC

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

Immunogen Information

WB	1:500 - 1:2000	Gene ID	Swiss Prot
IF/ICC	1:50 - 1:200	5770	P18031

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 281-435 of human PTPN1 (NP_002818.1).

Synonyms PTP1B; PTPN1

Contact

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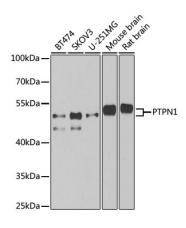
Product Information

Source Rabbit **Isotype** IgG Purification Affinity purification

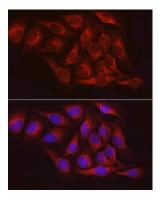
Storage

Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS with 0.05% proclin300,50% glycerol,pH7.3.

Validation Data



Western blot analysis of extracts of various cell lines, using PTPN1 antibody (A1590) at 1:1000 dilution. Secondary antibody: HRP 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). Blue: DAPI for nuclear staining.