

Recombinant PTP1B/PTPN1 Monoclonal Antibody

catalog number: **AN300316P**

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

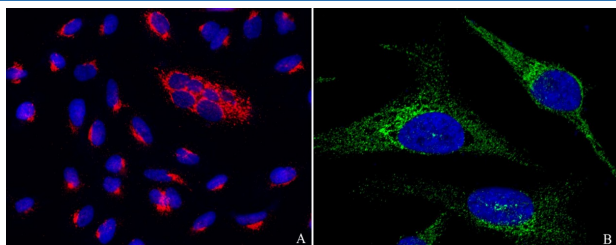
Description

Reactivity	Human
Immunogen	Recombinant Human PTP1B/PTPN1 protein
Host	Rabbit
Isotype	IgG
Clone	8D3
Purification	Protein A
Buffer	0.2 µm filtered solution in PBS

Applications Recommended Dilution

ICC/IF	1:20-1:100
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Data



Immunofluorescence analysis of human PTPN1 in A549 and Hela cells. Cells were fixed with 4% PFA, blocked with 10% serum, and incubated with Rabbit anti-human PTPN1 monoclonal antibody (1:60) at 4°C overnight. Then A549 cells were stained with the Alexa Fluor® 549-conjugated Goat Anti-rabbit IgG secondary antibody (figure A, captured by fluorescence microscope); Hela cells were stained with the Alexa Fluor® 488-conjugated Goat Anti-rabbit IgG secondary antibody (figure B, captured by laser confocal scanning microscope), countstained with DAPI (blue).

Positive staining was localized to cytoplasm.

Preparation & Storage

Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

Background

For Research Use Only

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.