

**PTP1B rabbit pAb****Cat#: orb766155 (Manual)**

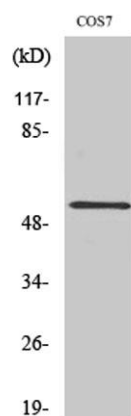
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<b>Product Name</b>	PTP1B rabbit pAb
<b>Host species</b>	Rabbit
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Species Cross-Reactivity</b>	Human;Mouse;Rat;Monkey
<b>Recommended dilutions</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications.
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human PTP1B. AA range:16-65
<b>Specificity</b>	PTP1B Polyclonal Antibody detects endogenous levels of PTP1B protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
<b>Storage</b>	Store at -20°C. Avoid repeated freeze-thaw cycles.
<b>Protein Name</b>	Tyrosine-protein phosphatase non-receptor type 1
<b>Gene Name</b>	PTPN1
<b>Cellular localization</b>	Endoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side . Interacts with EPHA3 at the cell membrane.
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using      epitope-specific immunogen.
<b>Clonality</b>	Polyclonal

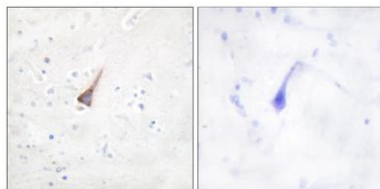
<b>Concentration</b>	1 mg/ml
<b>Observed band</b>	49kD
<b>Human Gene ID</b>	5770
<b>Human Swiss-Prot Number</b>	P18031
<b>Alternative Names</b>	PTPN1; PTP1B; Tyrosine-protein phosphatase non-receptor type 1; Protein-tyrosine phosphatase 1B; PTP-1B

### Background

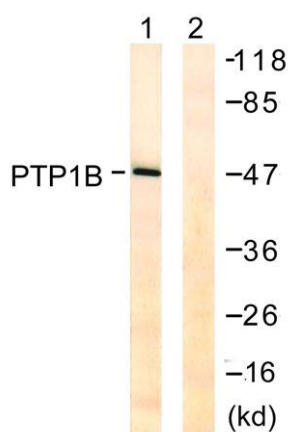
The protein encoded by this gene is the founding member of the protein tyrosine phosphatase (PTP) family, which was isolated and identified based on its enzymatic activity and amino acid sequence. PTPs catalyze the hydrolysis of the phosphate monoesters specifically on tyrosine residues. Members of the 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



**Western Blot analysis of various cells using PTP1B Polyclonal Antibody diluted at 1:500**



**Immunohistochemistry analysis of paraffin-embedded human brain tissue, using PTP1B Antibody. The picture on the right is blocked with the synthesized peptide.**



**Western blot analysis of lysates from COS7 cells, treated with UV 30', using PTP1B Antibody. The lane on the right is blocked with the synthesized peptide.**