



PTP1B Monoclonal Antibody

Catalog No	YP-mAb-14965
Isotype	IgG
Reactivity	Human;Mouse;Rat;Monkey
Applications	WB
Gene Name	PTPN1
Protein Name	Tyrosine-protein phosphatase non-receptor type 1
Immunogen	The antiserum was produced against synthesized peptide derived from human PTP1B. AA range:16-65
Specificity	PTP1B Monoclonal Antibody detects endogenous levels of PTP1B protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PTPN1; PTP1B; Tyrosine-protein phosphatase non-receptor type 1; Protein-tyrosine phosphatase 1B; PTP-1B
Observed Band	49kD
Cell Pathway	Endoplasmic reticulum membrane ; Peripheral membrane protein ; Cytoplasmic side . Interacts with EPHA3 at the cell membrane.
Tissue Specificity	Expressed in keratinocytes (at protein level).
Function	catalytic activity:Protein tyrosine phosphate + H(2)O = protein tyrosine + phosphate.,function:May play an important role in CKII- and p60c-src-induced signal transduction cascades.,PTM:Oxidized on Cys-215; the Cys-SOH formed in response to redox signaling reacts with the alpha-amido of the following residue to form a 4-amino-3-isothiazolidinone serine cross-link, triggering a conformational change that inhibits substrate binding and activity. The active site can be restored by reduction.,similarity:Belongs to the protein-tyrosine phosphatase family. Non-receptor class 1 subfamily.,similarity:Contains 1 tyrosine-protein phosphatase domain.,
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

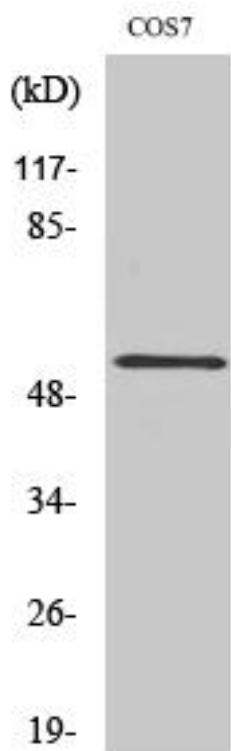
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using PTP1B Monoclonal Antibody