

## Anti-PTP1B Antibody (7G428)

### Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Molecular Weight:	Theoretical: 50 kDa. Actual: 50 kDa.
Clone:	7G428
Purification:	Protein A purified

### Applications

1. 25 µg total protein per lane of various lysates (see on figure) probed with PTP1B monoclonal antibody, unconjugated (TMAB-11914) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r. T. for 60 min.
2. Paraformaldehyde-fixed, paraffin embedded Mouse Colon; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with PTP1B Monoclonal Antibody, Unconjugated (TMAB-11914) at 1: 200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
3. Paraformaldehyde-fixed, paraffin embedded Rat Colon; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with PTP1B Monoclonal Antibody, Unconjugated (TMAB-11914) at 1: 200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
4. Paraformaldehyde-fixed, paraffin embedded Human Colon; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with PTP1B Monoclonal Antibody, Unconjugated (TMAB-11914) at 1: 200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
5. Paraformaldehyde-fixed, paraffin embedded Human Colon Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with PTP1B Monoclonal Antibody, Unconjugated (TMAB-11914) at 1: 200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
6. Paraformaldehyde-fixed, paraffin embedded Human Breast Cancer; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with PTP1B Monoclonal Antibody, Unconjugated (TMAB-11914) at 1: 200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
7. Paraformaldehyde-fixed, paraffin embedded Mouse Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with PTP1B Monoclonal Antibody, Unconjugated (TMAB-11914) at 1: 200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.
8. Paraformaldehyde-fixed, paraffin embedded Rat Kidney; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Antibody incubation with PTP1B Monoclonal Antibody, Unconjugated (TMAB-11914) at 1: 200 overnight at 4°C, followed by conjugation to the SP Kit (Rabbit) and DAB staining.

Verified Activity:

## A DRUG SCREENING EXPERT

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Application: WB,IHC-P,IHC-Fr,ICC/IF,IF,FCM  
Recommended WB: 1:500-2000; IHC-P: 1:200-500; IHC-Fr: 1:200-500; ICC/IF: 1:50-200; IF: 1:200-500; FCM: 1:50-100

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### Properties

Stability & Storage: Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.  
Shipping: Shipping with blue ice.

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### Antigen Details

Immunogen: A synthesized peptide: human PTPN1  
Antigen Species: Human  
Gene ID: 5770  
Uniprot ID: P18031

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### Research 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 this PTP in cell growth control, and cell response to interferon stimulation. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2013]

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Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481