

PTP1B Antibody (N-terminal)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8411C

Product Information

Application	WB, E
Primary Accession	P18031
Other Accession	P20417 , P35821 , NP_002818
Reactivity	Mouse, Rat, Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	23-53

Additional Information

Other Names	Tyrosine-protein phosphatase non-receptor type 1, Protein-tyrosine phosphatase 1B, PTP-1B, PTPN1, PTP1B
Target/Specificity	This PTP1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 23-53 amino acids from the N-terminal region of human PTP1B.
Dilution	WB~1:1000 E~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PTP1B Antibody (N-terminal) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Background

PTP1B 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.

References

Xu, J., et al., *Biochem. Biophys. Res. Commun.* 329(2):538-543 (2005).

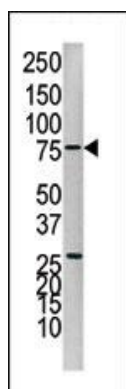
Palmer, N.D., et al., *Diabetes* 53(11):3013-3019 (2004).

Bento, J.L., et al., *Diabetes* 53(11):3007-3012 (2004).

Wiesmann, C., et al., *Nat Struct Mol Biol* 11(8):730-737 (2004).

Kipfer-Coudreau, S., et al., *Diabetologia* 47(7):1278-1284 (2004).

Images



Western blot analysis of anti-PTP1B Pab (Cat. #AP8411c) in Jurkat cell line lysate. PTP1B (arrow) was detected using the purified Pab.

Citations

- [Calpain-mediated degradation of reversibly oxidized protein-tyrosine phosphatase 1B.](#)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.