

# Anti-PTP1B (C-terminal region) Antibody

Catalog # AN1924

## Product Information

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<b>Application</b>	WB, ICC
<b>Primary Accession</b>	<a href="#">P18031</a>
<b>Host</b>	Mouse
<b>Clonality</b>	Mouse Monoclonal
<b>Isotype</b>	IgG2a
<b>Clone Names</b>	M234
<b>Calculated MW</b>	49967

## Additional Information

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<b>Gene ID</b>	5770
<b>Other Names</b>	PTPN1; TCPTP/PTPN2
<b>Dilution</b>	WB~~1:1000 ICC~~N/A
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	Anti-PTP1B (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
<b>Shipping</b>	Blue Ice

## Background

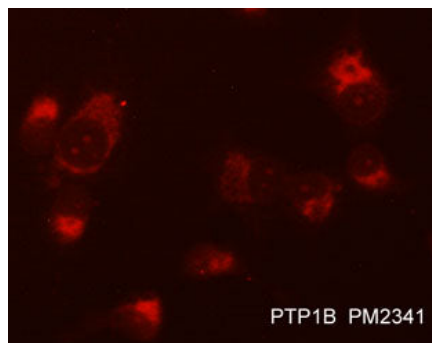
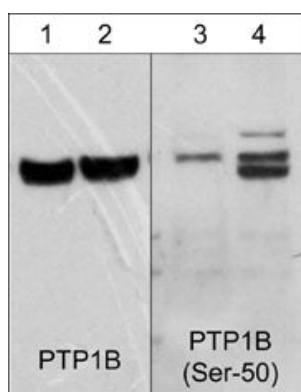
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PTP1B is a nonreceptor type protein tyrosine phosphatase that has essential roles in insulin and leptin signaling, as well as important functions in growth factor and integrin signaling. The structure of PTP1B includes a conserved phosphatase domain, C-terminal hydrophobic residues for targeting to the cytoplasmic face of the endoplasmic reticulum, and proline-rich regions characteristic of SH3 domain binding motifs. PTP1B can interact with N-Cadherin and dephosphorylate  $\beta$ -catenin associated with cadherin complexes. PTP1B also interacts with Insulin and EGF receptors, and undergoes phosphorylation after receptor stimulation. Tyrosine phosphorylation at Tyr-66, Tyr-152, and Tyr-153 occurs after insulin receptor activation, and tyrosine phosphorylation of Tyr-152 may be required for interactions with N-Cadherin. In addition, Akt can phosphorylate Ser-50 and this phosphorylation can reduce PTP1B activity.

## Images

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Western blot image of human Jurkat cells untreated (lanes 1 & 3) or treated (lanes 2 & 4) with calyculin A (100 nM for 30 min.). The blots were probed with mouse monoclonal anti-PTP1B (lanes 1 & 2) or rabbit polyclonal anti-PTP1B (Ser-50) (lanes 3 & 4).



Immunocytochemical labeling of PTP1B in methanol and acetone fixed human NCI-H1915 lung carcinoma cells. The cells were labeled with mouse monoclonal anti-PTP1B (AN1924) antibody. The antibody was detected using appropriate secondary antibody conjugated to DyLight® 594.

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