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Anti-PTP1B (C-terminal region) Antibody
Catalog # AN1924

Specification

Anti-PTP1B (C-terminal region) Antibody - Product Information

Application	**WB**
Primary Accession	P18031
Host	**Mouse**
Clonality	**Mouse Monoclonal**
Isotype	**IgG2a**
Calculated MW	**49967**

Anti-PTP1B (C-terminal region) Antibody - Additional Information

Gene ID **5770**

Other Names
PTPN1; TCPTP/PTPN2

Dilution
WB~~1:1000

Storage
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.

Precautions
Anti-PTP1B (C-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

Anti-PTP1B (C-terminal region) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-PTP1B (C-terminal region) Antibody - Images

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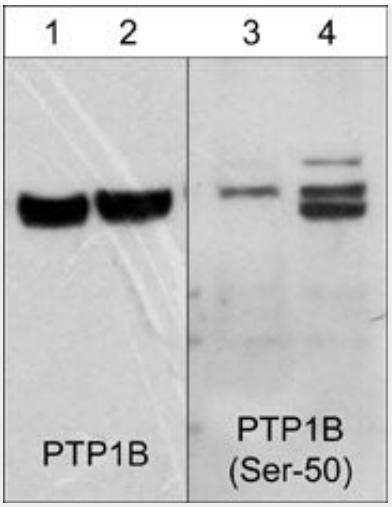
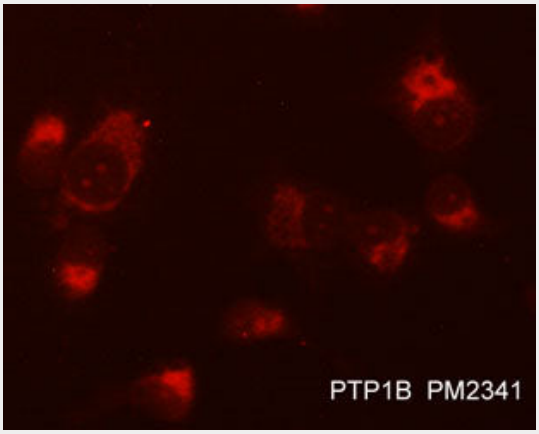


Western blot image of human Jurkat cells untreated (lanes 1 & 3) or treated (lanes 2 & 4) with calyculin A (100 nM for 30 min.). The blots were probed with mouse monoclonal anti-PTP1B (lanes 1 & 2) or rabbit polyclonal anti-PTP1B (Ser-50) (lanes 3 & 4).



Immunocytochemical labeling of PTP1B in methanol and acetone fixed human NCI-H1915 lung carcinoma cells. The cells were labeled with mouse monclonal anti-PTP1B (PM2341) antibody. The antibody was detected using appropriate secondary antibody conjugated to DyLight® 594.

Anti-PTP1B (C-terminal region) Antibody - Background

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 β-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.