

Anti-PTP1B (Ser-50), Phosphospecific Antibody
Catalog # AN1926**Specification****Anti-PTP1B (Ser-50), Phosphospecific Antibody - Product Information**

Application	WB
Primary Accession	P18031
Reactivity	Bovine
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	49967

Anti-PTP1B (Ser-50), Phosphospecific 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 (Ser-50), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

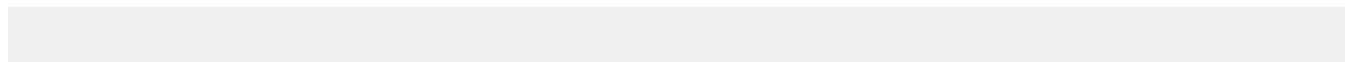
Shipping

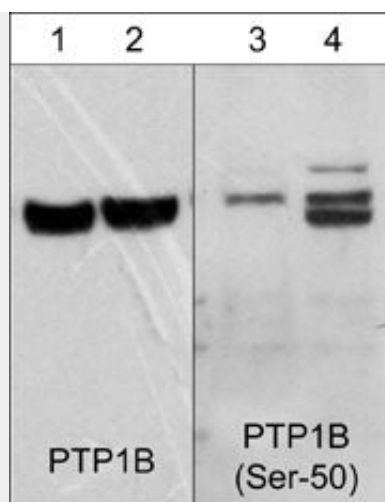
Blue Ice

Anti-PTP1B (Ser-50), Phosphospecific Antibody - Protocols

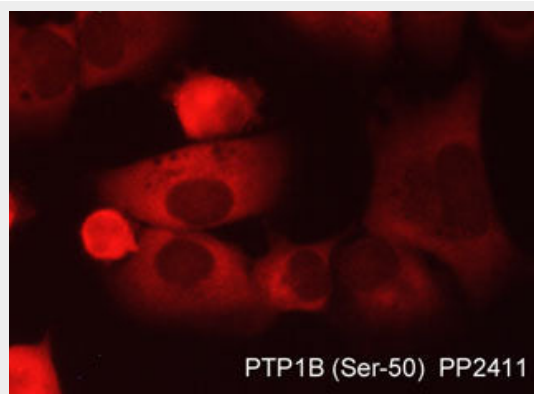
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-PTP1B (Ser-50), Phosphospecific Antibody - Images



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 aldehyde-fixed and NP-40 permeabilized human NCI-H1915 lung carcinoma cells. The cells were labeled with rabbit polyclonal anti-PTP1B (Ser-50) (PP2411) phosphospecific antibody. The antibody was detected using appropriate secondary antibody conjugated to DyLight® 594.

Anti-PTP1B (Ser-50), Phosphospecific 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.