

Rabbit PTP1B Polyclonal Antibody | anti-PTP1B antibody

PTP1B (Ser-50), phospho-specific Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA71693	Rabbit	Human, Rat, Mouse	Immunocytochemistry, ELISA, Western Blot

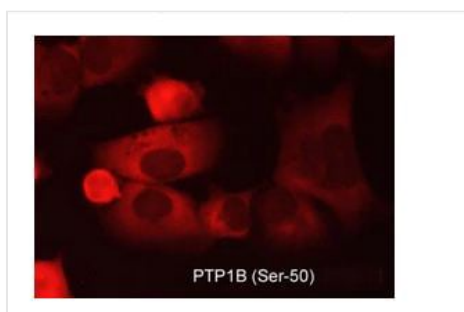
PRODUCT SYNONYMS

PTP1B; Polyclonal Antibody; PTP1B (Ser-50); phospho-specific Antibody; phospho-specific; PTP1B Ser-50; anti-PTP1B antibody

PRODUCT SPECIFICATIONS

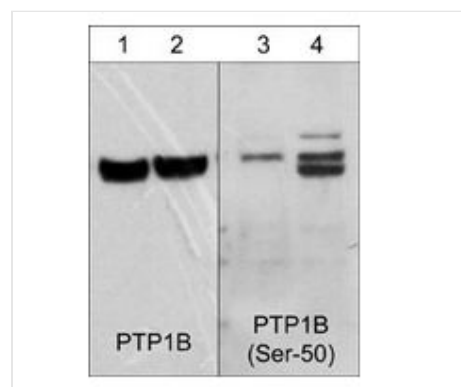
Host	Rabbit
Reactivity	Human, Rat, Mouse
Clonality	Polyclonal
Specificity	This antibody was affinity purified with phospho-PTP1B (Ser-50) peptide. The purified antibody detects a 50kDa* doublet corresponding to PTP1B in western blots of calyculin A treated human A431 and Jurkat cells. This reactivity is observed as a weak singlet in control cells and is not observed after lambda phosphatase treatment.
Form/Format	Rabbit polyclonal, affinity-purified antibody is supplied in 100ul phosphate-buffered saline, 50% glycerol, 1mg/ml BSA, and 0.05% sodium azide.
Applicable Applications for anti-PTP1B antibody	ICC (Immunocytochemistry), ELISA, WB (Western Blot)
Immunogen	PTP1B (Ser-50) synthetic peptide (coupled to carrier protein) corresponds to amino acids surrounding Ser-50 in human PTP1B. This sequence has significant homology to the conserved site in rat and mouse PTP1B, and has homology to conserved sites in TC-PTP and MPTP, but not other protein tyrosine phosphatase family members.
Preparation and Storage	Store at -20 degree C. Stable for 1 year.

IMAGES



ICC (Immunocytochemistry)

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.



WB (Western Blot)

Western blot image of human Jurkat cells untreated (lanes 1 & 3) or treated (lanes 2 & 4) with calyculin A (100nM 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).

ADDITIONAL INFORMATION

Related Product Information for anti-PTP1B antibody	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.
References	Lingamanaidu, V. et al. (2001) Molecular Endocrinology 15(10):1768. Rhee, J. et al. (2001) J. Biol. Chem. 276(9):6640. Bandyopadhyay, D. et al. (1997) J. Biol. Chem. 272(3):1639.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506289
NCBI GeneID	5770
NCBI Accession #	NP_002818.1
NCBI GenBank Nucleotide #	NM_002827.2
UniProt Accession #	P18031; Q5TGD8; Q9BQV9; Q9NQQ4
Molecular Weight	49,967 Da
NCBI Official Full Name	tyrosine-protein phosphatase non-receptor type 1
NCBI Official Synonym Full Names	protein tyrosine phosphatase, non-receptor type 1
NCBI Official Symbol	PTPN1
NCBI Official Synonym Symbols	PTP1B
NCBI Protein Information	tyrosine-protein phosphatase non-receptor type 1; protein tyrosine phosphatase 1B; protein-tyrosine phosphatase 1B; protein tyrosine phosphatase, placental
UniProt Protein Name	Tyrosine-protein phosphatase non-receptor type 1
UniProt Gene Name	PTPN1
UniProt Synonym Gene Names	PTP1B; PTP-1B
UniProt Entry Name	PTN1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ptp1b-antibody-immunocytochemistry-western-blot-elisa/71693>