

Rabbit PTP1B Polyclonal Antibody | anti-PTP1B antibody

Phospho-PTP1B (Tyr66) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329831	Rabbit	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Xenopus (86%)	ELISA, Immunocytochemistry, Immunofluorescence, Western Blot

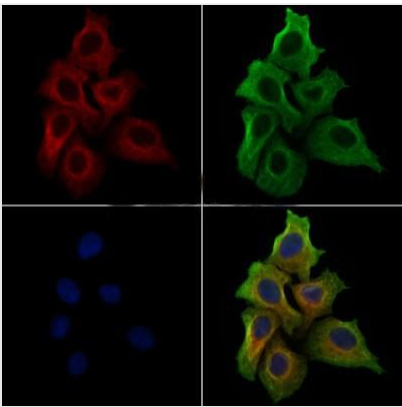
PRODUCT SYNONYMS

PTP1B; Polyclonal Antibody; Phospho-PTP1B (Tyr66) Antibody; Non receptor tyrosine phosphatase 1; Protein phosphotyrosylphosphatase 1B; Protein tyrosine phosphatase 1B; Protein tyrosine phosphatase non receptor type 1; Protein tyrosine phosphatase placental; Protein-tyrosine phosphatase 1B; PTN1_HUMAN; PTP 1B; PTP-1B; PTPN 1; PTPN1; Tyrosine protein phosphatase non receptor type 1; Tyrosine-protein phosphatase non-receptor type 1; anti-PTP1B antibody

PRODUCT SPECIFICATIONS

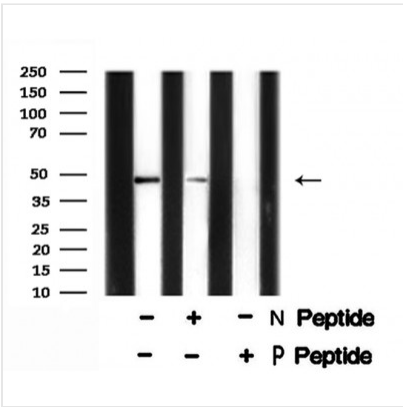
Host	Rabbit
Reactivity	Human, Mouse, Rat Predicted Reactivity: Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Xenopus (86%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-PTP1B (Tyr66) Antibody detects endogenous levels of PTP1B only when phosphorylated at Tyr66. Tissue Specificity: Expressed in keratinocytes (at protein level).
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-PTP1B antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PTP1B around the phosphorylation site of Tyr66.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Oxidized on Cys-215; the Cys-SOH formed in response to redox signaling reacts with the alpha-amido of the following residue to form a sulfenamide cross-link, triggering a conformational change that inhibits substrate binding and activity. The active site can be restored by reduction. Ser-50 is the major site of phosphorylation as compared to Ser-242 and Ser-243. Activated by phosphorylation at Ser-50. S-nitrosylation of Cys-215 inactivates the enzyme activity. Sulfhydration at Cys-215 following endoplasmic reticulum stress inactivates the enzyme activity, promoting EIF2AK3/PERK activity.
Subunit Structure	Interacts with EPHA3 (phosphorylated); dephosphorylates EPHA3 and may regulate its trafficking and function. Interacts with MET.
Similarity	Belongs to the protein-tyrosine phosphatase family. Non-receptor class 1 subfamily.
Subcellular Location	Endoplasmic reticulum membrane>Peripheral membrane protein>Cytoplasmic side. Note: Interacts with EPHA3 at the cell membrane.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

Staining Hela cells(serum starvation) by IF/ICC. The samples were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25 degree C. Samples were then incubated with primary Ab(AF8305 1:200) and mouse anti-beta tubulin Ab(T0023 1:200) for 1 hour at 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody.The nuclear counter stain is DAPI(blue).



WB (Western Blot)

Western blot analysis of PTP1B (Phospho-Tyr66) using MDA-MB-435 whole cell lysates.-/+ means absence or presence of N peptide(1/4 non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-PTP1B antibody	Tyrosine-protein phosphatase which acts as a regulator of endoplasmic reticulum unfolded protein response. Mediates dephosphorylation of EIF2AK3/PERK; inactivating the protein kinase activity of EIF2AK3/PERK. May play an important role in CKII- and p60c-src-induced signal transduction cascades. May regulate the EFNA5-EPHA3 signaling pathway which modulates cell reorganization and cell-cell repulsion. May also regulate the hepatocyte growth factor receptor signaling pathway through dephosphorylation of MET.
---	---

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/ptp1b-antibody-peptide-elisa-immunocytochemistry-immunofluorescence-western-blot-elisa/329831>