

#5311 Store at -20C

PTP1B Antibody

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H	Endogenous	50	Rabbit	#P18031	5770

Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	PTP1B Antibody detects endogenous levels of total PTP1B protein.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human PTP1B protein. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	Protein-tyrosine phosphatase 1B (PTP1B) is the original member of the protein tyrosine phosphatase (PTP) family of proteins (1). PTP1B is highly expressed in insulin-responsive tissues and negatively regulates insulin, as well as integrin, through dephosphorylation of phosphotyrosine residues (2-4). PTP1B knockout mice show resistance to dietary weight gain and enhanced insulin sensitivity, suggesting a possible role in treatment of obesity as well as type 2 diabetes (5).	
Background References	1. Liang, F. et al. (2005) <i>J Biol Chem</i> 280, 24857-63. 2. Kenner, K.A. et al. (1996) <i>J Biol Chem</i> 271, 19810-6. 3. Klamman, L.D. et al. (2000) <i>Mol Cell Biol</i> 20, 5479-89. 4. Liu, F. et al. (1998) <i>Curr Biol</i> 8, 173-6. 5. Elchebly, M. et al. (1999) <i>Science</i> 283, 1544-8.	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
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