

Datasheet for ABIN1881705
anti-PTPN1 antibody (AA 221-249)[Go to Product page](#)**1** Image**4** Publications

Overview

Quantity:	400 µL
Target:	PTPN1
Binding Specificity:	AA 221-249
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PTPN1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	This PTPN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 221-249 amino acids from the Central region of human PTPN1.
Clone:	RB41801
Isotype:	Ig Fraction
Predicted Reactivity:	Rat
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.

Target Details

Target:	PTPN1
Alternative Name:	PTPN1 (PTPN1 Products)

Target Details

Background:	The protein encoded by this gene is the founding member of the protein tyrosine phosphatase (PTP) family, which was isolated and identified based on its enzymatic activity and amino acid sequence. PTPs catalyze the hydrolysis of the phosphate monoesters specifically on tyrosine residues. Members of the PTP family share a highly conserved catalytic motif, which is essential for the catalytic activity. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP has been shown to act as a negative regulator of insulin signaling by dephosphorylating the phosphotyrosine residues of insulin receptor kinase. This PTP was also reported to dephosphorylate epidermal growth factor receptor kinase, as well as JAK2 and TYK2 kinases, which implicated the role of this PTP in cell growth control, and cell response to interferon stimulation.
Molecular Weight:	49967
NCBI Accession:	NP_001265547 , NP_002818
UniProt:	P18031
Pathways:	TLR Signaling , Response to Growth Hormone Stimulus , ER-Nucleus Signaling , Platelet-derived growth Factor Receptor Signaling

Application Details

Application Notes:	WB: 1:1000
Restrictions:	For Research Use only

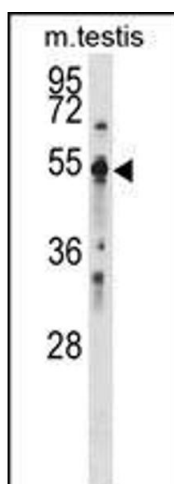
Handling

Format:	Liquid
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Expiry Date:	6 months

Publications

- Product cited in: Hyrskyluoto, Bruelle, Lundh, Do, Kivinen, Rappou, Reijonen, Waltimo, Petersén, Lindholm, Korhonen: "Ubiquitin-specific protease-14 reduces cellular aggregates and protects against mutant huntingtin-induced cell degeneration: involvement of the proteasome and ER stress-activated kinase IRE1?." in: **Human molecular genetics**, Vol. 23, Issue 22, pp. 5928-39, (2014) ([PubMed](#)).
- Davila, Froeling, Tan, Bonnard, Boland, Snippe, Hibberd, Seielstad: "New genetic associations detected in a host response study to hepatitis B vaccine." in: **Genes and immunity**, Vol. 11, Issue 3, pp. 232-8, (2010) ([PubMed](#)).
- Chen, Qin, Li, Walters, Wilson, Mei, Wilson: "The proteasome-associated deubiquitinating enzyme Usp14 is essential for the maintenance of synaptic ubiquitin levels and the development of neuromuscular junctions." in: **The Journal of neuroscience : the official journal of the Society for Neuroscience**, Vol. 29, Issue 35, pp. 10909-19, (2009) ([PubMed](#)).
- Nagai, Kadowaki, Maruyama, Takeda, Nishitoh, Ichijo: "USP14 inhibits ER-associated degradation via interaction with IRE1alpha." in: **Biochemical and biophysical research communications**, Vol. 379, Issue 4, pp. 995-1000, (2009) ([PubMed](#)).
- Mines, Goodwin, Limbird, Cui, Fan: "Deubiquitination of CXCR4 by USP14 is critical for both CXCL12-induced CXCR4 degradation and chemotaxis but not ERK activation." in: **The Journal of biological chemistry**, Vol. 284, Issue 9, pp. 5742-52, (2009) ([PubMed](#)).

Images



Western Blotting

Image 1. PTPN1 Antibody (Center) (ABIN1881705 and ABIN2839035) western blot analysis in mouse testis tissue lysates (35 µg/lane). This demonstrates the PTPN1 antibody detected the PTPN1 protein (arrow).