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PTPN1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20182C

Specification

PTPN1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P18031
Other Accession	P20417, P35821, NP_002818.1
Reactivity	**Mouse**
Predicted	**Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**49967**
Antigen Region	**221-249**

PTPN1 Antibody (Center) - Additional Information

Gene ID 5770

Other Names
Tyrosine-protein phosphatase non-receptor type 1, Protein-tyrosine phosphatase 1B, PTP-1B, PTPN1, PTP1B

Target/Specificity
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.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PTPN1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PTPN1 Antibody (Center) - Protein Information

Name PTPN1

Synonyms PTP1B

Function 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.

Cellular Location
Endoplasmic reticulum membrane; Peripheral membrane protein; Cytoplasmic side Note=Interacts with EPHA3 at the cell membrane

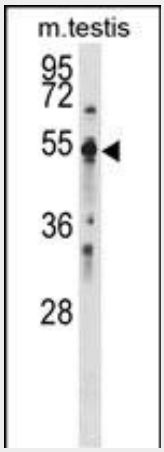
Tissue Location
Expressed in keratinocytes (at protein level).

PTPN1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PTPN1 Antibody (Center) - Images



PTPN1 Antibody (Center) (Cat. #AP20182c) western blot analysis in mouse testis tissue lysates (35ug/lane).This demonstrates the PTPN1 antibody detected the PTPN1 protein (arrow).

PTPN1 Antibody (Center) - 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 phosphotryosine 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.

PTPN1 Antibody (Center) - References

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