

# PTPD1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP8424a

## **Product Information**

**Application** IHC-P, WB, E **Primary Accession** Q16825 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB0623-0624 **Calculated MW** 133281 **Antigen Region** 751-780

## **Additional Information**

**Gene ID** 11099

Other Names Tyrosine-protein phosphatase non-receptor type 21, Protein-tyrosine

phosphatase D1, PTPN21, PTPD1

**Target/Specificity** This PTPD1 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 751-780 amino acids from the Central

region of human PTPD1.

**Dilution** IHC-P~~1:100~500 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

**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** PTPD1 Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

### **Protein Information**

Name PTPN21

Synonyms PTPD1

**Cellular Location** Cytoplasm, cytoskeleton.

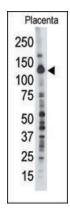
# **Background**

PTPD1 is a member of the protein tyrosine phosphatase (PTP) family. 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 contains an N-terminal domain, similar to cytoskeletal- associated proteins including band 4.1, ezrin, merlin, and radixin. This PTP was shown to specially interact with BMX/ETK, a member of Tec tyrosine kinase family characterized by a multimodular structures including PH, SH3, and SH2 domains. The interaction of this PTP with BMX kinase was found to increase the activation of STAT3, but not STAT2 kinase. Studies of the similar gene in mice suggested the possible roles of this PTP in liver regeneration and spermatogenesis.

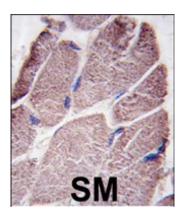
### References

Jui, H.Y., et al., J. Biol. Chem. 275(52):41124-41132 (2000). Tokuchi, H., et al., Int J Urol 6(11):572-577 (1999). Higashitsuji, H., et al., Oncogene 10(2):407-414 (1995). Moller, N.P., et al., Proc. Natl. Acad. Sci. U.S.A. 91(16):7477-7481 (1994).

## **Images**



Western blot analysis of anti-PTPD1 Pab (Cat. #AP8424a) in Placenta tissue lysate (35ug/lane). PTPD1(arrow) was detected using the purified Pab



Formalin-fixed and paraffin-embedded human skeletal muscle tissue reacted with PTPD1 antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

## **Citations**

BMX Negatively Regulates BAK Function, Thereby Increasing Apoptotic Resistance to Chemotherapeutic Drugs.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.