

For Research Use Only

# PTPMT1 Recombinant monoclonal antibody, PBS Only

Catalog Number:87082-1-PBS



## Basic Information

<b>Catalog Number:</b> 87082-1-PBS	<b>GenBank Accession Number:</b> BC020242	<b>Purification Method:</b> Protein A purification
<b>Source:</b> Rabbit	<b>GeneID (NCBI):</b> 114971	<b>CloneNo.:</b> 252195D2
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> Q8WUK0	
<b>Immunogen Catalog Number:</b> AG2063	<b>Full Name:</b> protein tyrosine phosphatase, mitochondrial 1	
	<b>Calculated MW:</b> 201 aa, 23 kDa	
	<b>Observed MW:</b> 16 kDa	

## Applications

**Tested Applications:**  
WB, Indirect ELISA

**Species Specificity:**  
human, mouse, rat

## Background Information

Protein Tyrosine Phosphatase localized to the Mitochondrial 1 (PTPMT1) is a highly conserved, dual-specific phosphatase that resides on the matrix-facing side of the inner mitochondrial membrane (IMM). PTPMT1 is a mitochondrial phosphatase and a vital regulator of mitochondrial activities. Current work points to roles for PTPMT1 in the regulation of mitochondrial respiration, dynamics, and ultrastructure through the modulation of pyruvate importation, the tuning of TCA cycle activity, and the synthesis of cardiolipin. PTPMT1 is highly expressed in pancreatic b cells, whose mitochondria have the important function of coupling glucose metabolism to the secretion of insulin. (PMID: 16337125, PMID: 16061174, PMID: 33335799)

## Storage

**Storage:**  
Store at -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS only, pH7.3

For technical support and original validation data for this product please contact:

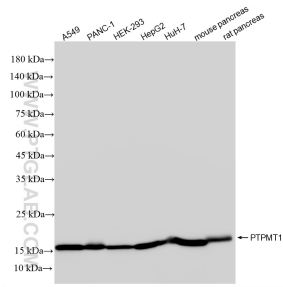
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

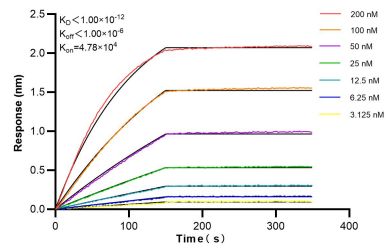
W: [ptgcn.com](http://ptgcn.com)

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## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 87082-1-RR (PTMPT1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87082-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 87082-1-RR against Human PTMPT1 were performed. The affinity constant is below 1 pM.