

For Research Use Only

PTPMT1 Recombinant monoclonal antibody

Catalog Number:87082-1-RR



Basic Information

Catalog Number: 87082-1-RR	GenBank Accession Number: BC020242	Purification Method: Protein A purification
Source: Rabbit	GeneID (NCBI): 114971	CloneNo.: 252195D2
Isotype: IgG	UNIPROT ID: Q8WUK0	Recommended Dilutions: WB: 1:5000-1:50000
Immunogen Catalog Number: AG2063	Full Name: protein tyrosine phosphatase, mitochondrial 1	
	Calculated MW: 201 aa, 23 kDa	
	Observed MW: 16 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls: WB: A549 cells, PANC-1 cells, HEK-293 cells, HepG2 cells, HuH-7 cells, mouse pancreas tissue, rat pancreas tissue
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 -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

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

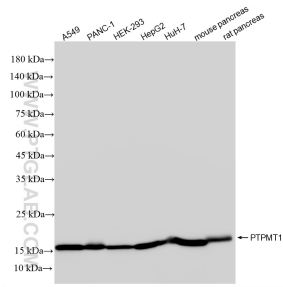
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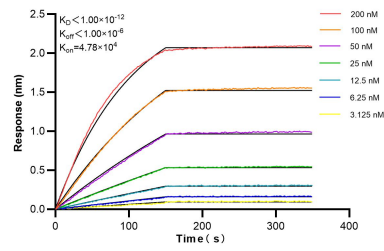
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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 87082-1-RR (PTPMT1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 87082-1-RR against Human PTTPM1 were performed. The affinity constant is below 1 pM.