

**PTPMT1 Antibody (Internal)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS10615****Specification**

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**PTPMT1 Antibody (Internal) - Product Information**

Application	IHC
Primary Accession	<a href="#">Q8WUK0</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23kDa KDa

**PTPMT1 Antibody (Internal) - Additional Information****Gene ID** 114971**Other Names**

Phosphatidylglycerophosphatase and protein-tyrosine phosphatase 1, 3.1.3.27, PTEN-like phosphatase, Phosphoinositide lipid phosphatase, Protein-tyrosine phosphatase mitochondrial 1, 3.1.3.16, 3.1.3.48, PTPMT1, MOSP, PLIP

**Target/Specificity**

Human PTPMT1. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

**Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

**Precautions**

PTPMT1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

**PTPMT1 Antibody (Internal) - Protein Information****Name** PTPMT1 ([HGNC:26965](#))**Synonyms** MOSP, PLIP**Function**

Lipid phosphatase which dephosphorylates phosphatidylglycerophosphate (PGP) to phosphatidylglycerol (PG) (By similarity). PGP is an essential intermediate in the biosynthetic pathway of cardiolipin, a mitochondrial-specific phospholipid regulating the membrane integrity and activities of the organelle (By similarity). Has also been shown to display phosphatase activity toward phosphoprotein substrates, specifically mediates dephosphorylation of mitochondrial proteins, thereby playing an essential role in ATP production (By similarity). Has probably a preference for proteins phosphorylated on Ser and/or Thr residues compared to proteins phosphorylated on Tyr residues (By similarity). Probably involved in regulation of insulin secretion

in pancreatic beta cells (By similarity). May prevent intrinsic apoptosis, probably by regulating mitochondrial membrane integrity (PubMed:<a href="http://www.uniprot.org/citations/24709986" target="\_blank">24709986</a>).

**Cellular Location**

Mitochondrion inner membrane {ECO:0000250|UniProtKB:P0C089}; Peripheral membrane protein {ECO:0000250|UniProtKB:P0C089}; Matrix side {ECO:0000250|UniProtKB:P0C089}

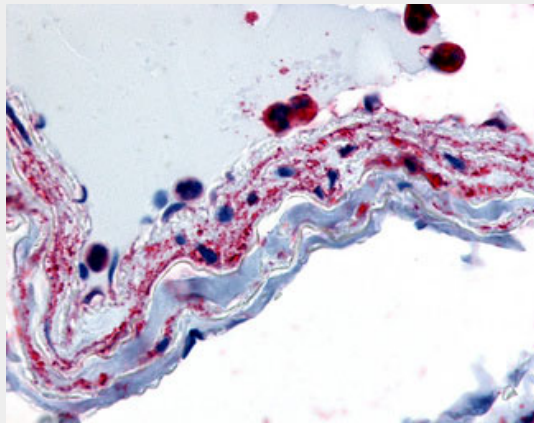
**Volume**

50  $\mu$ l

**PTPMT1 Antibody (Internal) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**PTPMT1 Antibody (Internal) - Images**

Anti-PTPMT1 antibody ALS10615 IHC of human vascular smooth muscle.

**PTPMT1 Antibody (Internal) - Background**

Lipid phosphatase which dephosphorylates phosphatidylglycerophosphate (PGP) to phosphatidylglycerol (PG). PGP is an essential intermediate in the biosynthetic pathway of cardiolipin, a mitochondrial-specific phospholipid regulating the membrane integrity and activities of the organelle. Has also been shown to display phosphatase activity toward phosphoprotein substrates, specifically mediates dephosphorylation of mitochondrial proteins, thereby playing an essential role in ATP production. Has probably a preference for proteins phosphorylated on Ser and/or Thr residues compared to proteins phosphorylated on Tyr residues. Probably involved in regulation of insulin secretion in pancreatic beta cells (By similarity).

**PTPMT1 Antibody (Internal) - References**

Lin L.,et al.Submitted (JUL-2003) to the EMBL/GenBank/DDBJ databases.  
Taylor T.D.,et al.Nature 440:497-500(2006).  
Yu W.-Q.,et al.Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.  
Burkard T.R.,et al.BMC Syst. Biol. 5:17-17(2011).  
Van Damme P.,et al.Proc. Natl. Acad. Sci. U.S.A. 109:12449-12454(2012).