10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PTPMT1 Rabbit pAb

PTPMT1 Rabbit pAb
Catalog # AP58280

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8WUK0
Reactivity	Human
Predicted	Rat, Pig, Dog, Mouse, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	22844
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PTPMT1
Epitope Specificity	101-201/201
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Mitochondrion inner membrane. Note=Associated with the inner membrane.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This protein phosphatase specifically mediates the dephosphorylation of mitochondrial proteins and consequently plays a central role in ATP production. It probably has a preference for proteins phosphorylated on Ser and/or Thr residues compared to phosphorylation on Tyr residues. It is likely to be involved in the regulation of insulin secretion in pancreatic beta cells.

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, PTPMT1 (HGNC:26965), MOSP, PLIP
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

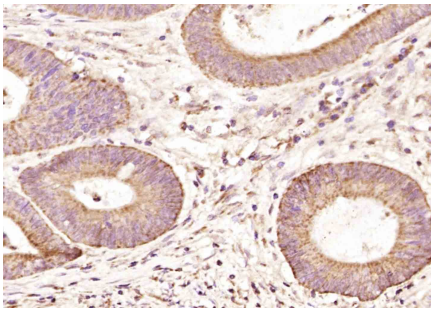
Protein Information

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 (PubMed:39279645). 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). Prevents intrinsic apoptosis, by regulating mitochondrial membrane integrity (PubMed:24709986, PubMed:39279645).
Cellular Location	Mitochondrion inner membrane {ECO:0000250|UniProtKB:P0C089}; Peripheral membrane protein {ECO:0000250|UniProtKB:P0C089}; Matrix side {ECO:0000250|UniProtKB:P0C089}

Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Images



Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PTPMT1) Polyclonal Antibody, Unconjugated (AP58280) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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