

# Recombinant human PTPMT1 protein

Catalog Number: ATGP1353

## PRODUCT INFORMATION

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**Expression system**

E.coli

**Domain**

28-201aa

**UniProt No.**

Q8WUK0

**NCBI Accession No.**

NP\_783859.1

**Alternative Names**

Protein tyrosine phosphatase mitochondrial 1, Phosphatidylglycerophosphatase and protein-tyrosine phosphatase 1, PTEN-like phosphatase, Phosphoinositide lipid phosphatase, MOSP, PLIP, DUSP23

## PRODUCT SPECIFICATION

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**Molecular Weight**

22.5 kDa (199aa) confirmed by MALDI-TOF

**Concentration**

1mg/ml (determined by Bradford assay)

**Formulation**

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1mM DTT, 0.15M NaCl.

**Purity**

&gt; 95% by SDS-PAGE

**Tag**

His-Tag

**Application**

SDS-PAGE

**Storage Condition**

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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**Description**

PTPMT1 (protein tyrosine phosphatase mitochondrial 1), also known as MOSP or PLIP (phosphoinositide lipid phosphatase) and previously known as DuSP23, is a widely expressed PTP membrane protein with high expression levels in pancreatic beta cells. This protein exclusively localizes to the matrix face of the inner membrane of the mitochondrion. It is responsible for dephosphorylating mitochondrial proteins and therefore plays a significant role in the production of ATP and secretion of insulin. For its substrate, PTPMT1 displays a

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specific preference for the lipid signaling molecule phosphatidylinositol 5-phosphate. Recombinant human PTPMT1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

MGSSHHHHHHH SSGLVPRGSH MGSHM>KVPGR AHRDWYHRID PTVLLGALPL RSLTRQLVQD ENVRGVITMN  
EEYETRFLCN SSQEWKRLGV EQLRLSTVDM TGIPTLDNLQ KGVQFALKYQ SLGQCVYVHC KAGRSRSATM VAAYLIQVHK  
WSPEEAVRAI AKIRSYIHIR PGQLDVLKEF HKQITARATK DGTFVISKT

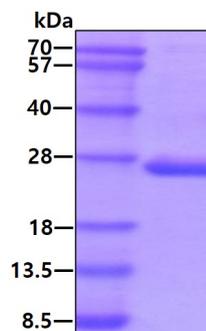
## General References

Pagliarini DJ., et al. (2005) Mol Cell. 19(2):197-207.

Merlot S., et al. (2003) J Biol Chem. 278(41):39866-73.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.