

Recombinant human PTPMT1 protein

Catalog Number: ATGP1353

PRODUCT INFORMATION

Expression system

E.coli

Domain

28-201aa

UniProt No.

Q8WUK0

NCBI Accession No.

NP_783859.1

Alternative Names

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

PRODUCT SPECIFICATION

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

> 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

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

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

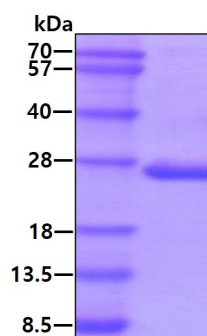
General References

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.