

Recombinant Human MPI, His-tagged

Cat. No. MPI-1019H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human MPI protein, fused to His-tag at N-terminus, was expressed in E.coli (1-362aa).
Species	Human
Source	Human
Description	Mannose-6-phosphate isomerase, also known as MPI, belongs to the mannose-6-phosphate isomerase type 1 family, and is expressed in all tissues, more abundantly in heart, brain and skeletal muscle. Localized to the cytoplasm, MPI utilizes zinc as a cofactor and catalyzes the interconversion of fructose-6-phosphate and mannose-6-phosphate. Mutations in the MPI gene were found in patients with carbohydrate-deficient glycoprotein syndrome, type Ib.
Form	Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M Urea, 5% glycerol
Molecular Weight	41.9 kDa (382aa)
Purity	> 90% by SDS - PAGE
Concentration	0.5 mg/ml (determined by Bradford assay)
Sequences of amino acids	MGSSHHHHHH SSSLVPRGSH MAAPRVFPLS CAVQQYAWGK MGSNSEVARL LASSDPLAQI AEDKPYAELW MGTHPRGDAK ILDNRSQKT LSQWIAENQD SLGSKVKDTF NGNLPFLFKV LSVETPLSIQ AHPNKELAEK LHLQAPQHYP

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

DANHKPEMAI ALTPFQGLCG FRPVVEIVTF LKTAAGNNME DIFGELLQL
 HQQYPGDIGC FAIYFLNLLT LKPGAMFLE ANVPHAYLKG DCVECMACSD
 NTVRAGLTPK FIDVPTLCEM LSYTPSSSKD RLFLPTRSQE DPYLSIYDPP
 VPDFTIMKTE VPGSVTEYKV LALDSASILL MVQGTVIASST PTTQTPIPLQ
 RGGVLFIGAN ESVSLKLTEP KDLLIFRACC LL

Storage Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

Pathways Amino sugar and nucleotide sugar metabolism; Asparagine N-linked glycosylation; Fructose and mannose metabolism; Metabolic pathways; Metabolism of proteins; Post-translational protein modification; Synthesis of GDP-mannose; Synthesis of substrates in N-glycan biosynthesis

GENE INFORMATION

Gene Name [MPI mannose phosphate isomerase \[Homo sapiens \]](#)

Official Symbol [MPI](#)

Synonyms MPI; PMI; PMI1; CDG1B; FLJ39201; mannose phosphate isomerase; mannose-6-phosphate isomerase; phosphohexomutase; OTTHUMP00000183487; phosphomannose isomerase 1; mannose-6-phosphate isomerase; EC 5.3.1.8; EC 5.3.18

Gene ID [4351](#)

mRNA Refseq [NM_002435](#)

Protein Refseq [NP_002426](#)

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



MIM	154550
UniProt ID	P34949
Chromosome Location	15q22-qter
Function	isomerase activity; mannose-6-phosphate isomerase activity; metal ion binding; zinc ion binding

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA