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**Product Data Sheet**


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Product Name: MPI Human  
 Cat. No.: GP21952  
 Batch No.: 1

**Product Data**

Purity	>98%	Source	E.coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Mannose-6-phosphate isomerase; PMI1; CDG1B; Phosphohexomutase; Phosphomannose isomerase; EC 5.3.1.8; FLJ39201.		
Amino Acid Sequence	MGSSHHHHHH SGLVPRGSH MAAPRVFPLS CAVQQYAWGK MGSNSEVARL LASSDPLAQI AEDKPYAELW MGTHPRGDAK ILDNRISQKT LSQWIAENQD SLGSKVKDTF NGNLPFLFKV LSVETPLSIQ AHPNKELAEK LHLQAPQHYP DANHKPEMAI ALTPFQGLCG FRPVEEIVTF LKTAAGNNME DIFGELLQL HQQYPGDIGC FAIYFLNLLT LKPGEAMFLE ANVPHAYLKG DCVECMACSD NTVRAGLTPK FIDVPTLCEM LSYTPSSSKD RLFLPTRSQE DPYLSIYDPP VPDFTIMKTE VPGSVTEYKV LALDSASIL MVQGTVIAS PTTQTPIPLQ RGGVLFIGN ESVSLKLTEP KDLLIFRACC LL		
Formulation	The MPI solution (0.5mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.4M Urea and 5% glycerol.		

**Introduction**

MPI is a member of the mannose-6-phosphate isomerase type 1 family. Although MPI is expressed in all tissues, it can be found more abundantly in heart, brain and skeletal muscle. Localized to the cytoplasm, MPI exploits zinc as a cofactor and catalyzes the interconversion of fructose-6-phosphate and mannose-6-phosphate. Mutations in the MPI gene are the cause of carbohydrate-deficient glycoprotein syndrome, type Ib.

**Stability**

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Background**

**Caution: Product has not been fully validated for medical applications. For research use only.**

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Address: 10292 Central Ave. #205, Montclair, CA, USA

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MPI Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 382 amino acids (1-362) and having a molecular mass of 41.9 kDa. The MPI is fused to a 20 amino acid His-Tag at N-terminus and purified by proprietary chromatographic techniques.

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