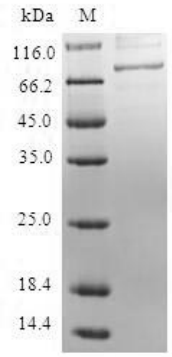
Recombinant Human Mannose-6-phosphate isomerase (MPI)

Product Code	CSB-EP014754HU
Relevance	Involved in the synthesis of the GDP-mannose and dolichol-phosphate-mannose required for a number of critical mannosyl transfer reactions.
Abbreviation	Recombinant Human MPI protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P34949
Alias	Phosphohexomutase Phosphomannose isomerase
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	AAPRVFPLSCAVQQYAWGKMGSNSEVARLLASSDPLAQIAEDKPYAELWMGT HPRGDAKILDNRISQKTLSQWIAENQDSLGSKVKDTFNGNLPFLFKVLSVETPL SIQAHPNKELAEKLHLQAPQHYPDANHKPEMAIALTPFQGLCGFRPVEEIVTFL KKVPEFQFLIGDEAATHLKQTMSHDSQAVASSLQSCFSHLMKSEKKVVVEQLN LLVKRISQQAAAGNNMEDIFGELLLQLHQQYPGDIGCFAIYFLNLLTLKPGEAM FLEANVPHAYLKGDCVECMACSDNTVRAGLTPKFIDVPTLCEMLSYTPSSSKD RLFLPTRSQEDPYLSIYDPPVPDFTIMKTEVPGSVTEYKVLALDSASILLMVQGT VIASTPTTQTPIPLQRGGVLFIGANESVSLKLTEPKDLLIFRACCLL
Research Area	Signal Transduction
Source	E.coli
Target Names	MPI
Protein Names	Recommended name: Mannose-6-phosphate isomerase EC= 5.3.1.8 Alternative name(s): Phosphohexomutase Phosphomannose isomerase Short name= PMI
Expression Region	1-423aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal GST-tagged
Mol. Weight	73.5kDa
Protein Length	Full Length
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

This Human MPI recombinant protein was produced in E.coli, where the gene sequence encoding Human MPI (1-423aa) was expressed with the N-terminal GST tag. The purity of this MPI protein was greater than 90% by SDS-PAGE. MPI is an important enzyme involved in various sugar metabolism pathways, including ribose and N-glycosylation. It plays a crucial role in maintaining cellular energy balance and protein modification. Defects in MPI are associated with disorders related to mannose metabolism, and it also has significant applications in biotechnology. Research on MPI contributes to a deeper understanding of sugar metabolism processes and provides insights into the treatment of related diseases.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.
Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.