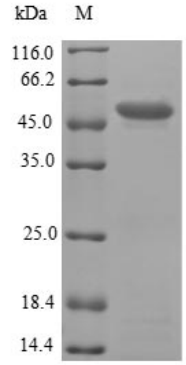
Recombinant Human Phosphomannomutase 2 (PMM2)

Product Code	CSB-EP018238HU
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 PMM2 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.	O15305
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	AAPGPALCLFDVDGTLTAPRQKITKEMDDFLQKLRQKIKIGVVGGSDFEKVQE QLGNDVVEKYDYVFPENGLVAYKDGKLLCRQNIQSHLGEALIQDLINYCLSYIA KIKLPKKRGTFIEFRNGMLNVSPIGRSCSQEERIEFYELDKKENIRQKFVADLRK EFAGKGLTFSIGGQISFDVFPDGWDKRYCLRHVENDGYKTIYFFGDKTMPGG NDHEIFTDPRTMGYSVTAPEDTRRICELLFS
Research Area	Signal Transduction
Source	E.coli
Target Names	PMM2
Protein Names	Recommended name: Phosphomannomutase 2 Short name= PMM 2 EC= 5.4.2.8
Expression Region	1-246aa
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	55.0kDa
Protein Length	Full Length
Image	



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

Description

This Human PMM2 recombinant protein was produced in E.coli, where the gene sequence encoding Human PMM2 (1-246aa) was expressed with the N-terminal GST tag. The purity of this PMM2 protein was greater than 90% by SDS-PAGE. One of the primary functions of PMM2 is to catalyze the isomerization reaction between mannose-6-phosphate and mannose-1-phosphate. This reaction is a crucial step in the mannose metabolism pathway, generating mannose-1-phosphate, which is utilized in the synthesis of various important glycoproteins and sugar molecules. PMM2 mediates the synthesis and metabolism of mannose, which is vital for multiple biological processes. Glycoproteins are a class of proteins with attached sugar molecules, and they play roles in cell signaling, cell adhesion, immune system function, and more. Mutations in PMM2 are associated with a genetic disorder known as Phosphomannomutase 2 deficiency (PMM2-CDG). This is a rare metabolic disorder that results in abnormal glycoprotein synthesis, affecting the function of various organs and systems, including the nervous system, muscular system, immune system, and others. The symptoms and severity of PMM2-CDG can vary among individuals.

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

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