



# Mannose Phosphate Isomerase mouse mAb

<b>Catalog No</b>	YP-Ab-04461
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat
<b>Applications</b>	WB;ICC
<b>Gene Name</b>	mpi
<b>Protein Name</b>	
<b>Immunogen</b>	Purified recombinant human Mannose Phosphate Isomerase protein fragments expressed in E.coli.
<b>Specificity</b>	This antibody detects endogenous levels of Mannose Phosphate Isomerase and does not cross-react with related proteins.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	wb 1:1000 icc 1:300
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	PMI1;CDG1B;FLJ39201;Mannose 6 phosphate isomerase;Mannose-6-phosphate isomerase; MANNOSEPHOSPHATE ISOMERASE;MGC94106;MPI;MPI_HUMAN;Phosphohexamutase;phosphomannose isomerase 1;Phosphomannose isomerase;PMI;PMI1.
<b>Observed Band</b>	54kD
<b>Cell Pathway</b>	Cytoplasm .
<b>Tissue Specificity</b>	Expressed in all tissues, but more abundant in heart, brain and skeletal muscle.
<b>Function</b>	catalytic activity:D-mannose 6-phosphate = D-fructose 6-phosphate.,cofactor: Binds 1 zinc ion per subunit.,disease:Defects in MPI are the cause of congenital disorder of glycosylation type 1B (CDG1B) [MIM:602579]; also known as carbohydrate-deficient glycoprotein syndrome type 1b (CDGS1B). Congenital disorders of glycosylation are metabolic deficiencies in glycoprotein biosynthesis that usually cause severe mental and psychomotor retardation. They are characterized by under-glycosylated serum glycoproteins. CDG1B is clinically characterized by protein-losing enteropathy.,function:Involved in the synthesis of the GDP-mannose and dolichol-phosphate-mannose required for a number of critical mannosyl transfer reactions.,pathway:Nucleotide-sugar biosynthesis; GDP-D-mannose biosynthesis; alpha-D-mannose 1-phosphate from D-fructose



6-phosphate: step 1/2.,similarity:Belongs to the mannose-6-phosp

### Background

Phosphomannose isomerase catalyzes the interconversion of fructose-6-phosphate and mannose-6-phosphate and plays a critical role in maintaining the supply of D-mannose derivatives, which are required for most glycosylation reactions. Mutations in the MPI gene were found in patients with carbohydrate-deficient glycoprotein syndrome, type Ib. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014],

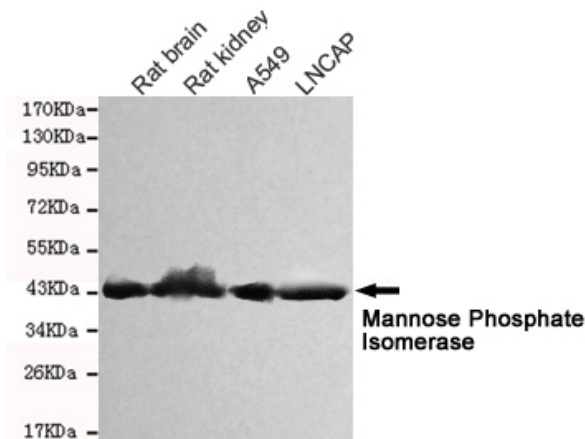
### matters needing attention

Avoid repeated freezing and thawing!

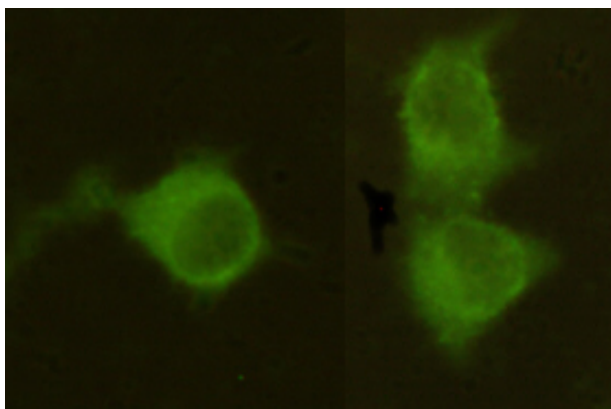
### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images



Western blot detection of Mannose Phosphate Isomerase in Rat kidney,Rat brain,A549 and Lncap cell lysates and using Mannose Phosphate Isomerase mouse mAb (1:1000 diluted).Predicted band size: 54KDa.Observed band size: 45KDa.



Immunocytochemistry stain of HeLa using Mannose Phosphate Isomerase mouse mAb (1:300).