

**Mannose Phosphate Isomerase mouse mAb**

<b>Catalog No :</b>	YM1237
<b>Reactivity :</b>	Human;Rat
<b>Applications :</b>	WB;ICC
<b>Target :</b>	Mannose Phosphate Isomerase
<b>Fields :</b>	>>Fructose and mannose metabolism;>>Amino sugar and nucleotide sugar metabolism;>>Metabolic pathways;>>Biosynthesis of cofactors;>>Biosynthesis of nucleotide sugars
<b>Gene Name :</b>	mpi
<b>Human Gene Id :</b>	4351
<b>Human Swiss Prot No :</b>	P34949
<b>Mouse Swiss Prot No :</b>	Q924M7
<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>Dilution :</b>	wb 1:1000 icc 1:300
<b>Purification :</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 54kD

**Cell Pathway :** Fructose and mannose metabolism;Amino sugar and nucleotide sugar metabolism;

**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],

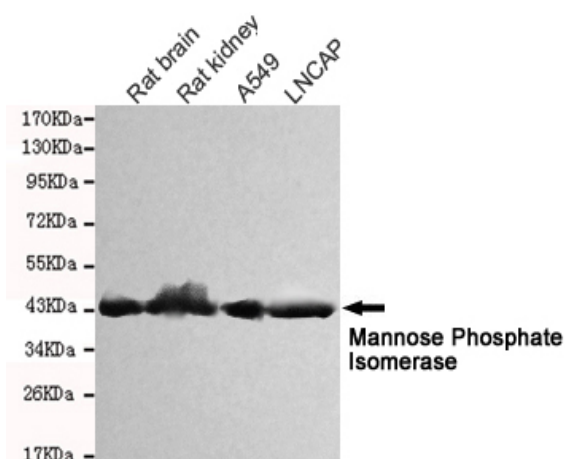
**Function :** catalytic activity:D-mannose 6-phosphate = D-fructose 6-phosphate.,cofactor:Binds 1 zinc ion per subunit.,disease:Defects in MPI are the cause of congenital disorder of glycosylation type 1B (CDG1B) [MIM:602579]; also known as carbohydrate-deficient glycoprotein syndrome type Ib (CDGS1B). 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

**Subcellular Location :** Cytoplasm .

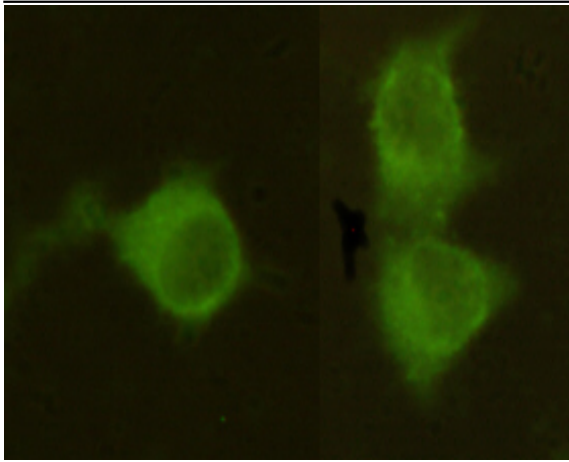
**Location :**

**Expression :** Expressed in all tissues, but more abundant in heart, brain and skeletal muscle.

## 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).