Best Tools for immunology Research

Mannose Phosphate Isomerase mouse mAb

Catalog No :	YM1237
Reactivity :	Human;Rat
Applications :	WB;ICC
Target :	Mannose Phosphate Isomerase
Fields :	>>Fructose and mannose metabolism;>>Amino sugar and nucleotide sugar metabolism;>>Metabolic pathways;>>Biosynthesis of cofactors;>>Biosynthesis of nucleotide sugars
Gene Name :	mpi
Human Gene Id :	4351
Human Swiss Prot No :	P34949
Mouse Swiss Prot No :	Q924M7
Immunogen :	Purified recombinant human Mannose Phosphate Isomerase protein fragments expressed in E.coli.
Specificity :	This antibody detects endogenous levels of Mannose Phosphate Isomerase and does not cross-react with related proteins.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	wb 1:1000 icc 1:300
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-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;

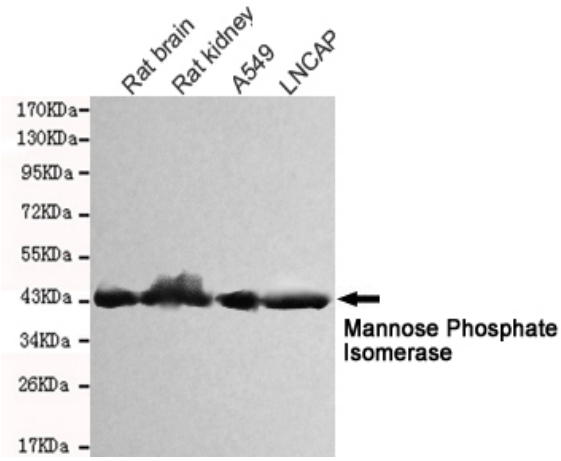
Background : Phosphomannose isomerase catalyzes the interconversion of fructose-6-phosphate and mannose-6-phosphate and plays a critical role in maintaining the supply of D-mannose derivatives, which are required for most glycosylation reactions. Mutations in the MPI gene were found in patients with 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

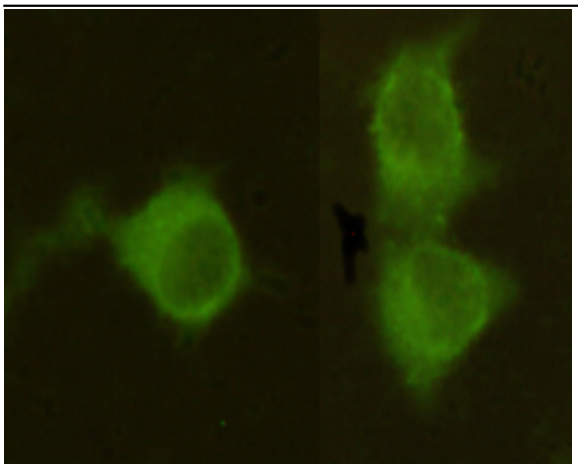
Subcellular Location : Cytoplasm .

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).