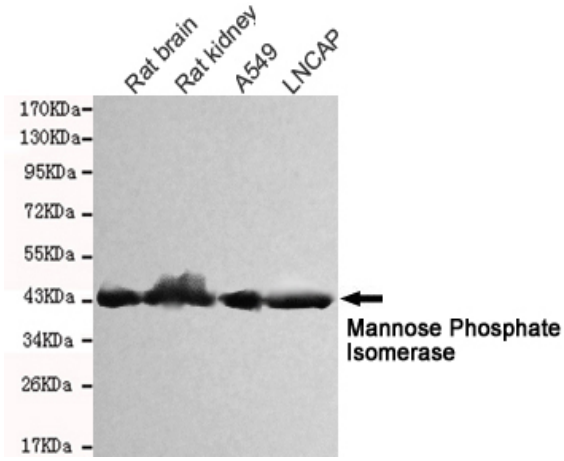
Best Tools for immunology Research

Mannose Phosphate Isomerase mouse mAb

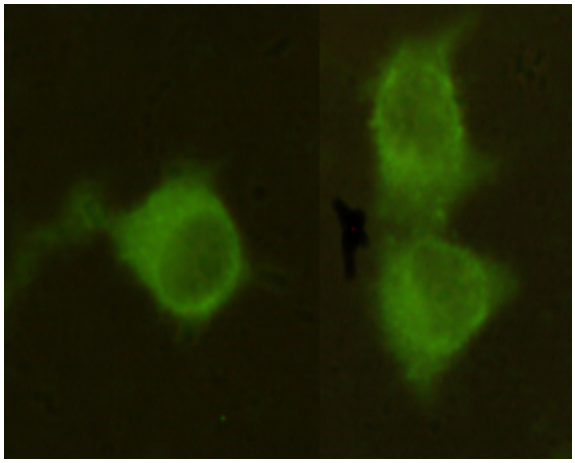
Catalog No :	YM1237
Reactivity :	Human;Rat
Applications :	WB;ICC
Target :	Mannose Phosphate Isomerase
Fields :	>>Fructose and mannose metabolism;>>Amino sugar and nucleotide sugar metabolism;>>Metabolic pathways;>>Biosynthesis of cofactors;>>Biosynthesis of nucleotide sugars
Gene Name :	mpi
Human Gene 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.
Sort :	9359
No4 :	1
Host :	Mouse
Modifications :	Unmodified

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).