



Mannose Phosphate Isomerase mouse mAb

Catalog No	YP-Ab-04461
Isotype	IgG
Reactivity	Human;Rat
Applications	WB;ICC
Gene Name	mpi
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
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	wb 1:1000 icc 1:300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Phosphomannose isomerase;Phosphohexomutase;Mannose-6-phosphate isomerase;mannose;Mannose Phosphate Isomerase;mpi;PMI1;CDG1B; FLJ39201;Mannose 6 phosphate isomerase;MANNOSEPHOSPHATE ISOMERASE;MGC94106;MPI_HUMAN;phosphomannose isomerase 1;PMI; PMI1.
Observed Band	54kD
Calculated Molecular Weight	54kD
Cell Pathway	Cytoplasm .
Tissue Specificity	Expressed in all tissues, but more abundant in heart, brain and skeletal muscle.
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 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],

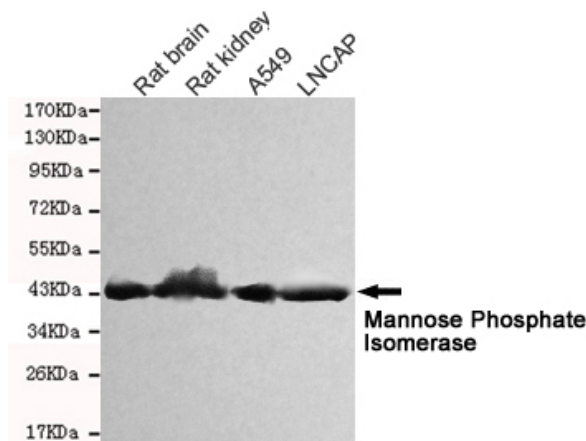
matters needing attention

Avoid repeated freezing and thawing!

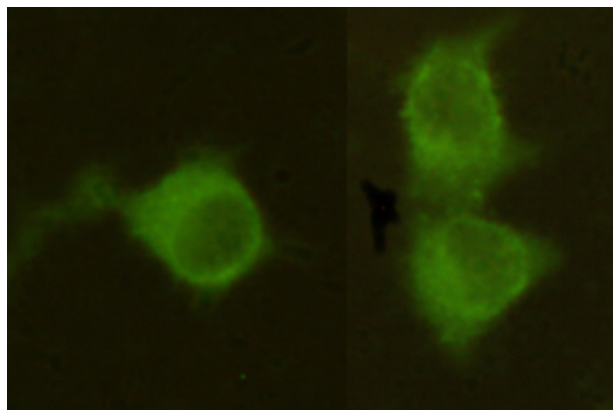
Usage suggestions

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).