10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# MPI/Mannose Phosphate Isomerase Rabbit pAb

Catalog # AP97551

## Product Information

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| **Application** | IHC-P, IHC-F, IF, E |
| **Primary Accession** | P34949 |
| **Other Accession** | P34949 |
| **Predicted** | Rat, Pig, Human, Mouse, Horse, Sheep |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 46656 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human MPI/Mannose Phosphate Isomerase |
| **Epitope Specificity** | 61-160/423 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the mannose-6-phosphate isomerase type 1 family. |
| **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. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | 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] |

## Additional Information

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| **Gene ID** | 4351 |
| **Other Names** | CDG1B; PMI; PMI1; 1110002E17Rik; Mpi-1; Mpi1; MPI_BOVIN; MPI; Phosphohexomutase; Phosphomannose isomerase (PMI); 5.3.1.8; MPI_HUMAN; MPI_MOUSE; MPI_RAT; mannose phosphate isomerase; mannose-6-phosphate isomerase |
| **Dilution** | IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000 |

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| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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| **Name** | MPI ( HGNC:7216) |
| **Synonyms** | PMI1 |
| **Function** | Isomerase that catalyzes the interconversion of fructose-6-P and mannose-6-P and has a critical role in the supply of D-mannose derivatives required for many eukaryotic glycosylation reactions. |
| **Cellular Location** | Cytoplasm {ECO:0000250\|UniProtKB:Q924M7}. |
| **Tissue Location** | Expressed in all tissues, but more abundant in heart, brain and skeletal muscle. |

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