

Product datasheet for **RG237809**

Mannose Phosphate Isomerase (MPI) (NM_001289156) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mannose Phosphate Isomerase (MPI) (NM_001289156) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mannose Phosphate Isomerase
Synonyms:	CDG1B; PMI; PMI1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237809 representing NM_001289156. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGGGGACTACCCCGAGGGGATGCCAAGATCCTTGACAACCGCATCTCACAGAAGACCCTAAGCCAG
TGGATTGCTGAGAACCAGGACAGCTTGGGCTCAAAGGTCAAGGACACCTTTAATGGCAACCTGCCCTTC
CTCTTCAAAGTGCTCTCAGTTGAAACACCCCTGTCCATCCAGGCACACCCTAACAAAGGAGCTGGCAGAG
AAGCTGCACCTCCAGGCTCCGCAGCACTACCCCGATGCCAACCACAAGCCAGAGATGGCCATTGCCCTC
ACCCCTTCCAGGGCTTGTGTGGCTTCCGGCCAGTTGAGGAGATTGTAACTTTCTAAAGAAGGTGCTT
GAGTTTCAGTTTCTGATTGGAGATGAGGCAGCAACACACCTGAAGCAGACCATGAGCCATGACTCCCAG
GCTGTGGCCTCCTCTCTGCAGAGCTGTTTCTCCACCTGATGAAGAGTGAGAAGAAGGTGGTGGTGAA
CAGCTCAACCTGTTGGTGAAGCGGATCTCCAGCAAGCGGCTGCCGAAACAACATGGAGGACATCTTT
GGGGAGCTTTTGCTACAGCTGCACCAGCAGTACCCAGGTGATATCGGCTGCTTTGCCATCTACTTCTCTG
AACCTGCTTACCCTGAAGCCTGGGGAGGCCATGTTTCTGGAGGCCAACGTACCCCATGCCTACCTGAAA
GGAGACTGCGTGGAGTGCATGGCGTGTTCAGACAACACAGTTCGTGCTGGCCTGACACCCAAGTTCATT
GATGTGCCAACCTGTGTGAAATGCTCAGCTATACCCCTAGCTCCAGCAAGGACAGGCTCTTTCTCCCA
ACACGGAGTCAGGAAGACCCCTACCTCTCAATCTATGACCCCTGTACCAGACTTACCATTATGAAG
ACGGAGTCCCTGGCTCTGTCACTGAATAACAAGTCTTGGCACTGGACTCTGCCAGCATCCTCTGATG
GTACAGGGGACAGTAATAGCCAGCACACCACAACCCAGACACCAATCCCTCTGCAACGTGGTGGCGTG
CTCTTCATTGGGGCCAATGAGAGTGCTCACTGAAGCTTACTGAGCCGAAGGACCTGCTGATATTCCGT
GCCTGCTGTCTGCTG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence: >Peptide sequence encoded by RG237809
 Blue=ORF Red=Cloning site Green=Tag(s)

MGTHPRGDAKILDNRISQKTL SQWIAENQDSLGSVKVDTFNGNLPFLFKVLSVETPLSIQAHPNKELAE
 KLHLQAPQHYPDANHKPEMAIALTPFQGLCGFRPVVEIVTFLKKVPEFQFLIGDEAATHLKQTM SHDSQ
 AVASSLQSCF SHLMKSEKKVVVEQLNLLVKRISQQAAGNMMEDIFGELLLQLHQYYPGDIGCF AIYFL
 NLLTLKPGEAMFLEANVPHAYLKGDCVECMACSDNTVRAGLTPKFIDVPTLCEMLSYTPSSSKDRLFLP
 TRSQEDPYLSIYDPPVPDFTIMKTEVPGSVTEYKVLALDSASILLMVQGTVIASPTTQTPIPLQRGGV
 LFIGANESVSLKLTPEKDLLIFRACCLL
 TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001289156

ORF Size: 1119 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

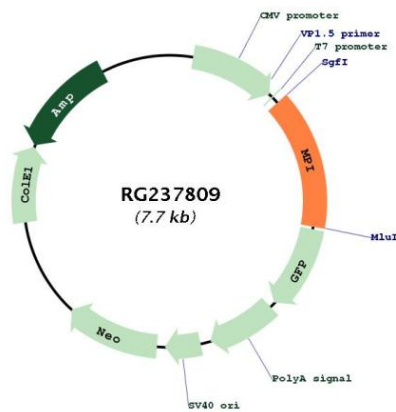
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

RefSeq: [NM_001289156.2](#)

RefSeq Size: 2949 bp

RefSeq ORF:	1122 bp
Locus ID:	4351
UniProt ID:	P34949
Cytogenetics:	15q24.1
Protein Families:	ES Cell Differentiation/IPS
Protein Pathways:	Amino sugar and nucleotide sugar metabolism, Fructose and mannose metabolism, Metabolic pathways
MW:	41.7 kDa
Gene Summary:	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]

Product images:



Circular map for RG237809