

## 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:	MPI
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
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



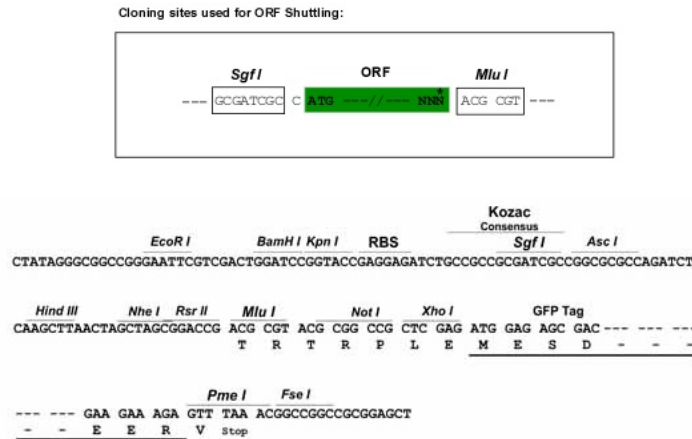
[View online »](#)

Protein Sequence: >Peptide sequence encoded by RG237809  
 Blue=ORF Red=Cloning site Green=Tag(s)

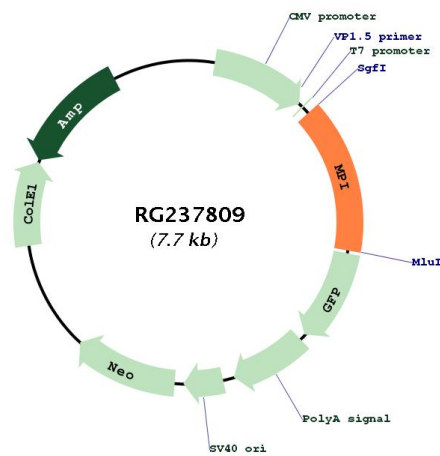
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 NLLTLKPGEAMFLEANVPHAYLKGDCVECMACSDNTVRAGLTPKFIDVPTLCEMLSYPSSSKDRFLFP  
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**TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV**  
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 SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



<b>ACCN:</b>	NM_001289156
<b>ORF Size:</b>	1119 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>RefSeq:</b>	<a href="#">NM_001289156.2</a>
<b>RefSeq Size:</b>	2949 bp
<b>RefSeq ORF:</b>	1122 bp
<b>Locus ID:</b>	4351
<b>UniProt ID:</b>	<a href="#">P34949</a>
<b>Cytogenetics:</b>	15q24.1
<b>Protein Families:</b>	ES Cell Differentiation/IPS
<b>Protein Pathways:</b>	Amino sugar and nucleotide sugar metabolism, Fructose and mannose metabolism, Metabolic pathways
<b>MW:</b>	41.7 kDa
<b>Gene Summary:</b>	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]