

Mannose-6-Phosphate Isomerase

[View the current Mannose-6-Phosphate Isomerase InDepth page on BioPortfolio.com](http://www.bioportfolio.com/indepth/Mannose-6-Phosphate_Isomerase.html)

(http://www.bioportfolio.com/indepth/Mannose-6-Phosphate_Isomerase.html)

Recent Publications on Mannose-6-Phosphate Isomerase:



- [Evaluation of selection strategies alternative to nptII in genetic transformation of citrus.](#)
*The neomycin phosphotransferase (nptII) selection system has proved...*9th September, 2008
Centre of Plant Protection and Biotechnology, Instituto Valenciano de- Plant Cell Rep. 2008
Jun;27(6):1005-15. Epub 2008 Mar 4. ([DOI Direct Link](#))
- [Cloning, expression, purification, crystallization and preliminary X-ray crystallographic analysis of the mannose 6-phosphate isomerase from Salmonella typhimurium.](#)
*Mannose 6-phosphate isomerase (MPI; EC 5.3.1.8) catalyzes the reversible...*8th August, 2008
Molecular Biophysics Unit, Indian Institute of Science, Bangalore 560 012,- Acta Crystallogr Sect F
Struct Biol Cryst Commun. 2008 Feb 1;64(Pt ([DOI Direct Link](#)))
- [The relative contribution of mannose salvage pathways to glycosylation in PMI-deficient mouse embryonic fibroblast cells.](#)
*Mannose for mammalian glycan biosynthesis can be imported directly from...*18th June, 2008
Department of Applied Biological Science, Tokyo University of Agriculture- FEBS J. 2008
Feb;275(4):788-98. Epub 2008 Jan 22. ([DOI Direct Link](#))
- [Evolutionary diversity in polystomatids infecting tetraploid and octoploid Xenopus in East African highlands: biological and molecular evidence.](#)
*Species of Protopolystoma are monogenean flukes that only infect...*2nd October, 2007
School of Biology, University of Nottingham, Nottingham NG7 2RD, UK.- Parasitology. 2007
Aug;134(Pt 9):1223-35. Epub 2007 Apr 12. ([DOI Direct Link](#))
- [Genetic heterogeneity among intertidal habitats in the flat periwinkle, Littorina obtusata.](#)
*Comparisons among patterns exhibited by functionally distinct genetic...*7th August, 2007
Department of Biology, University of Pennsylvania, 433 S. University- Mol Ecol. 2007
Jun;16(11):2393-404. ([DOI Direct Link](#))
- [Prospecting the utility of a PMI/mannose selection system for the recovery of transgenic sugarcane \(Saccharum spp. hybrid\) plants.](#)
*For the first time, the phosphomannose isomerase (PMI, EC...*21st July, 2007
Department of Agronomy, Genetics Institute, University of Florida,- Plant Cell Rep. 2007
May;26(5):581-90. Epub 2006 Dec 6. ([DOI Direct Link](#))
- [The use of the phosphomannose isomerase gene as alternative selectable marker for Agrobacterium-mediated transformation of flax \(Linum usitatissimum\).](#)
*In order to meet the future requirement of using non-antibiotic resistance...*18th July, 2007
Laboratoire de Biologie des Ligneux et des Grandes Cultures, UPRES EA- Plant Cell Rep. 2007
Jun;26(6):765-72. Epub 2007 Jan 5. ([DOI Direct Link](#))

- [Binding of 5-phospho-D-arabinonohydroxamate and 5-phospho-D-arabinonate inhibitors to zinc phosphomannose isomerase from *Candida albicans* studied by polarizable molecular mechanics and quantum mechanics.](#)
Type I phosphomannose isomerase (PMI) is a Zn-dependent metalloenzyme... 23rd May, 2007
 Laboratoire de Chimie Bioorganique et Bioinorganique, CNRS-UMR 8182,- J Comput Chem. 2007 Apr 15;28(5):938-57. ([DOI Direct Link](#))
- [Successful genetic transformation of Chinese cabbage using phosphomannose isomerase as a selection marker.](#)
A mannose selection system was adapted for use in the... 2nd May, 2007
 Department of Plant Resources, Sangju National University, Sangju,- Plant Cell Rep. 2007 Mar;26(3):337-44. Epub 2006 Oct 5. ([DOI Direct Link](#))
- [Computational study of human phosphomannose isomerase: Insights from homology modeling and molecular dynamics simulation of enzyme bound substrate.](#)
Phosphomannose isomerase is a zinc metalloenzyme that catalyzes the... 28th February, 2007
 Institute of Materia Medica, Chinese Academy of Medical Sciences and- J Mol Graph Model. 2006 Nov;25(3):289-95. Epub 2006 Feb 20. ([DOI Direct Link](#))
- [The *Burkholderia cepacia* *bceA* gene encodes a protein with phosphomannose isomerase and GDP-D-mannose pyrophosphorylase activities.](#)
*The *bceA* gene is part of the *Burkholderia cepacia* IST408 exopolysaccharide...* 7th February, 2007
 IBB-Institute for Biotechnology and Bioengineering, Centre for Biological- Biochem Biophys Res Commun. 2007 Feb 2;353(1):200-6. Epub 2006 Dec 11. ([DOI Direct Link](#))
- [The use of the phosphomannose-isomerase/mannose selection system to recover transgenic apple plants.](#)
*A selection system based on the phosphomannose-isomerase gene (*pmi*) as a...* 3rd February, 2007
 Institute of Biological Production Systems, Fruit Science Section,- Plant Cell Rep. 2006 Nov;25(11):1149-56. Epub 2006 Jun 13. ([DOI Direct Link](#))
- [Incomplete cryptic speciation between intertidal and subtidal morphs of *Acrocnida brachiata* \(Echinodermata: Ophiuroidea\) in the Northeast Atlantic.](#)
*The brittle-star *Acrocnida brachiata* (Montagu) lives in sandy-bottom...* 15th November, 2006
 Ecologie Benthique, UMR7144, CNRS-UPMC, B.P.74, 29682 Roscoff, France.- Mol Ecol. 2006 Oct;15(11):3303-18. ([DOI Direct Link](#))
- [Preliminary studies on the inhibition of D-sorbitol-6-phosphate 2-dehydrogenase from *Escherichia coli* with substrate analogues.](#)
D-Sorbitol-6-phosphate 2-dehydrogenase catalyzes the NADH-dependent... 24th August, 2006
 Laboratoire de Chimie Bioorganique et Bioinorganique, Centre National de- J Enzyme Inhib Med Chem. 2006 Apr;21(2):187-92.
- [Polyphyly and gene flow between non-sibling *Heliconius* species.](#)
BACKGROUND: The view that gene flow between related animal species is rare... 1st August, 2006
 Galton Laboratory, Department of Biology, University College London, 4- BMC Biol. 2006 Apr 21;4:11. ([DOI Direct Link](#))

Mannose-6-Phosphate Isomerase Patents:



- 6710227- [Cyclin-dependent kinase inhibitors and uses thereof](#)

- 7005562- [SAR and pathogen-inducible promoter](#)
- 7052895- [Phosphodiesterase enzymes](#)
- 7052913- [Matrices for drug delivery and methods for making and using the same](#)
- 7063971- [Phosphodiesterase enzymes](#)
- 7081563- [Thermotolerant phytase for animal feed](#)
- 7091024- [Enzyme PDE XVI](#)
- 7098378- [Transgenic plants comprising nucleic acid molecules encoding RAR1 disease resistance proteins and uses thereof](#)
- 7102057- [Self-processing plants and plant parts](#)
- 7109033- [Stress-regulated genes of plants, transgenic plants containing same, and methods of use](#)
- 7119251- [Basal endosperm transfer cell layer \(BELT\) specific genes](#)
- 6991916- [Compounds for the treatment of sexual dysfunction](#)
- 6967035- [Method of improving dough and bread quality](#)
- 6958236- [Control of gene expression in plants](#)
- 6806085- [2-deoxyglucose-6-phosphate \(2-DOG-6-P\) phosphatase DNA sequences as selection marker in plants](#)
- 6824783- [Methods for inhibition of membrane fusion-associated events, including HIV transmission](#)
- 6825325- [Molecular pathogenicide mediated plant disease resistance](#)
- 6878529- [Compounds for the treatment of sexual dysfunction](#)
- 6892139- [Determining the functions and interactions of proteins by comparative analysis](#)
- 6900181- [Pharmaceutical composition](#)
- 6908740- [Methods and apparatus for gel-free qualitative and quantitative proteome analysis, and uses therefore](#)
- 6924145- [Selection method](#)
- 6951717- [Methods and compositions for inhibition of membrane fusion-associated events, including HIV transmission](#)
- 6956115- [Nucleic acid molecules from rice encoding RAR1 disease resistance proteins and uses thereof](#)
- 7119255- [Promoter from maize prolamin seed storage protein and uses thereof](#)
- 7122190- [Fusion proteins comprising DP-178 and other viral fusion inhibitor peptides useful for treating aids](#)
- 7317138- [Thermotolerant phytase for animal feed](#)
- 7317140- [Sugar and lipid metabolism regulators in plants II](#)
- 7332310- [Mutant of homoserine dehydrogenase from Corynebacterium and DNA encoding thereof](#)
- 7335813- [Expression cassettes for guard cell-preferential expression in plants](#)
- 7342147- [Expression cassettes for root-preferential expression in plants](#)
- 7345216- [Expression cassettes for meristem-preferential expression in plants](#)
- 7351877- [Lambda integrase mediated recombination in plants](#)
- 7375209- [Expression cassettes for seed-preferential expression in plants](#)
- 7378493- [Vip3 toxins and methods of use](#)
- 7378572- [Constitutive expression cassettes for regulation of plant expression](#)
- 7309816- [Zinc finger proteins expressed in plant meristem](#)
- 7273614- [Nucleic acids encoding DP-178 and other viral fusion inhibitor peptides useful for treating aids](#)
- 7270984- [Polynucleotides encoding a 6-phosphogluconolactonase polypeptide from corynebacterium glutamicum](#)
- 7141717- [Thermotolerant phytase for animal feed](#)
- 7166312- [Process for stabilizing proteins in an acidic environment with a high-ester pectin](#)
- 7166770- [Cestrum yellow leaf curling virus promoters](#)
- 7169595- [Thermotolerant phytase for animal feed](#)
- 7186887- [Nucleic acids encoding oryza sativa nuclear cap binding protein 80 and methods of use](#)
- 7199286- [Plant-derived novel pathogen and SAR-induction chemical induced promoters, and fragments thereof](#)
- 7208317- [In Vitro mutagenesis, phenotyping, and gene mapping](#)

- 7230159- [Isolated BOS1 gene promoters from arabidopsis and uses thereof](#)
- 7235710- [Regulatory sequence](#)
- 7265267- [Cyclin-dependent kinase inhibitors and uses thereof](#)
- 7427489- [Screening assay to identify modulators of the sleep/wake cycle](#)

Resources from the [NCBI](#) used in this document, [NCBI's standard disclaimer applies](#).

Nothing in this document should be used in place of personal medical advice from your own qualified medical practitioner. See BioPortfolio.com [User Agreement](#)

Send comments and feedback to:

Peter Barfoot Managing Director, BioPortfolio Ltd.

UK Tel: (+44) 1300 321501

USA Voicemail and Fax: (+1) 415 680 2472

[Peter Barfoot peter.barfoot@bioportfolio.com](mailto:peter.barfoot@bioportfolio.com)

All rights reserved. All other trademarks recognized.

BioPortfolio Limited is registered in England & Wales at Wessex Barn, Dorchester Road, Frampton, Dorset, DT2 9NB, UK. No.3312883 VAT No. GB 744 6483 10

Copyright 1997-2008 - BioPortfolio Limited.

