

# Malate Synthase

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## Recent Publications on Malate Synthase:

- [The activity of the glyoxylate cycle in peroxisomes of \*Candida albicans\* depends on a functional {beta}-oxidation pathway: evidence for reduced metabolite transport across the peroxisomal membrane.](#)  
*The glyoxylate cycle, a metabolic pathway required for generating C(4)...*4th October, 2008  
Department of Medical Biochemistry, Academic Medical Center, Meibergdreef- Microbiology. 2008 Oct;154(Pt 10):3061-72. ([DOI Direct Link](#))
- [A novel strategy involved anti-oxidative defense: the conversion of NADH into NADPH by a metabolic network.](#)  
*The reduced nicotinamide adenine dinucleotide phosphate (NADPH) is pivotal...*25th September, 2008  
Department of Chemistry and Biochemistry, Laurentian University, Sudbury,- PLoS ONE. 2008 Jul 16;3(7):e2682. ([DOI Direct Link](#))
- [\[Effect of heavy metals on activity of key enzymes of glyoxylate cycle and content of thiobarbituric acid reactive substances in the germinating soybean \*Glycine max\* L.seeds\]](#)  
*The influence of CoCl<sub>2</sub> and CdCl<sub>2</sub> on the activity of isocitrate lyase,...*24th September, 2008  
- Ukr Biokhim Zh. 2008 Jan-Feb;80(1):83-8.
- [Can sugars be produced from fatty acids? A test case for pathway analysis tools.](#)  
*MOTIVATION: In recent years, several methods have been proposed for...*23rd September, 2008  
Department of Bioinformatics, Friedrich-Schiller-Universitat Jena,- Bioinformatics. 2008 Sep 19. ([DOI Direct Link](#))
- [Anaerobic glyoxylate cycle activity during simultaneous utilization of glycogen and acetate in uncultured \*Accumulibacter\* enriched in enhanced biological phosphorus removal communities.](#)  
*Enhanced biological phosphorus removal (EBPR) communities protect...*12th September, 2008  
Advanced Water Management Centre, The University of Queensland, St Lucia,- ISME J. 2008 Oct;2(10):1040-51. Epub 2008 Sep 11. ([DOI Direct Link](#))
- [When is a peroxisome not a peroxisome?](#)  
*It is time to drop the glyoxysome name. Recent functional genomics...*5th September, 2008  
Australian Research Council Centre of Excellence in Plant Energy Biology- Trends Plant Sci. 2008 Sep 1. ([DOI Direct Link](#))
- [Effects of salts on aerobic metabolism of \*Debaryomyces hansenii\*.](#)  
*Debaryomyces hansenii was grown in YPD medium without or with 1.0 M NaCl...*30th August, 2008  
Departamento de Genetica Molecular, Instituto de Fisiologia Celular,- FEMS Yeast Res. 2008 Aug 20. ([DOI Direct Link](#))
- [Atomic Resolution Structures of \*Escherichia coli\* and \*Bacillus anthracis\* Malate Synthase A: Comparison with Isoform G and Implications for Structure Based Drug Discovery.](#)

- Enzymes of the glyoxylate shunt are important for the virulence of...* 21st August, 2008  
- Protein Sci. 2008 Aug 19. ([DOI Direct Link](#))
- [Root exudates stimulate the uptake and metabolism of organic carbon in germinating spores of \*Glomus intraradices\*.](#)  
\* *Root exudates play a key role during the presymbiotic growth phase and...* 13th August, 2008  
Rutgers, State University of New Jersey, Biology Department, Camden, NJ- New Phytol. 2008 Aug 5. ([DOI Direct Link](#))
  - [Karyotype determination and gene mapping in two clinical isolates of \*Penicillium marneffei\*.](#)  
*Electrophoretic karyotypes from two clinical isolates of *Penicillium*...* 1st August, 2008  
Department of Biological Sciences, Youngstown State University,- Med Mycol. 2008 Jul 31:1-10. ([DOI Direct Link](#))
  - [Pseudomonas aeruginosa twitching motility-mediated chemotaxis towards phospholipids and fatty acids: specificity and metabolic requirements.](#)  
*Pseudomonas aeruginosa demonstrates type IV pilus-mediated directional...* 4th July, 2008  
Department of Microbiology, University of Colorado-Denver, Aurora, CO- J Bacteriol. 2008 Jun;190(11):4038-49. Epub 2008 Apr 4. ([DOI Direct Link](#))
  - [Genetic analysis of the role of peroxisomes in the utilization of acetate and fatty acids in \*Aspergillus nidulans\*.](#)  
*Peroxisomes are organelles containing a diverse array of enzymes. In fungi...* 18th June, 2008  
Department of Genetics, University of Melbourne, Melbourne, Victoria 3010,- Genetics. 2008 Mar;178(3):1355-69. Epub 2008 Feb 3. ([DOI Direct Link](#))
  - [Biomarkers for clinical and incipient tuberculosis: performance in a TB-endemic country.](#)  
*BACKGROUND: Simple biomarkers are required to identify TB in both...* 29th May, 2008  
Department of Internal Medicine, Post Graduate Institute of Medical- PLoS ONE. 2008 Apr 30;3(4):e2071. ([DOI Direct Link](#))
  - [Humoral immune responses of tuberculosis patients in Brazil indicate recognition of \*Mycobacterium tuberculosis\* MPT-51 and GlcB.](#)  
*The humoral responses to recombinant MPT-51 and GlcB was determined by...* 17th April, 2008  
Departamento de Microbiologia, Imunologia, Parasitologia e Patologia,- Clin Vaccine Immunol. 2008 Mar;15(3):579-81. Epub 2008 Jan 16. ([DOI Direct Link](#))
  - [Isolation of glyoxysomes from pumpkin cotyledons.](#)  
*Peroxisomes are single-membrane-bound organelles found in virtually all...* 1st March, 2008  
University of Michigan, Ann Arbor, Michigan, USA.- Curr Protoc Cell Biol. 2006 Jan;Chapter 3:Unit 3.19. ([DOI Direct Link](#))

## Malate Synthase Patents:



- 6884614- [Corynebacterium glutamicum genes encoding phosphoenolpyruvate: sugar phosphotransferase system proteins](#)
- 7052913- [Matrices for drug delivery and methods for making and using the same](#)
- 7056739- [Compositions and methods for modulation of plant cell division](#)
- 7078592- [Nucleic acids encoding coleopteran-toxic polypeptides and insect-resistant transgenic plants comprising them](#)
- 7105721- [Genes for microsomal delta-12 fatty acid desaturases and hydroxylases from plants](#)

- 7109392- [Methods for increasing oleic acid content in seeds from transgenic plants containing a mutant delta 12 desaturase](#)
- 7141388- [Nucleotide sequences for transcriptional regulation in corynebacterium glutamicum](#)
- 7141432- [Method of using reduced dimensionality nuclear magnetic resonance spectroscopy for rapid chemical shift assignment and secondary structure determination of proteins](#)
- 7141664- [Genes coding carbon metabolism and energy-producing proteins](#)
- 7186513- [Methods for monitoring multiple gene expression](#)
- 7192749- [Use of the repressor glxR for the synthesis of lysine in Corynebacterium glutamicum](#)
- 7041814- [Nucleic acid and amino acid sequences relating to Enterobacter cloacae for diagnostics and therapeutics](#)
- 7022897- [Polynucleotides encoding .DELTA.-endotoxins toxic to lepidoptera and coleoptera, and method of use](#)
- 7018794- [Methods for monitoring multiple gene expression](#)
- 6902887- [Methods for monitoring multiple gene expression](#)
- 6908740- [Methods and apparatus for gel-free qualitative and quantitative proteome analysis, and uses therefore](#)
- 6919466- [Genes for microsomal delta-12 fatty acid desaturases and related enzymes from plants](#)
- 6927046- [Increased lysine production by gene amplification using coryneform bacteria](#)
- 6942994- [Materials and methods for the alteration of enzyme and acetyl CoA levels in plants](#)
- 6943010- [Down-regulation and silencing of allergen genes in transgenic peanut seeds](#)
- 6949356- [Methods for improving secondary metabolite production in fungi](#)
- 6962989- [Corynebacterium glutamicum genes encoding novel proteins](#)
- 6979732- [Polynucleotide compositions encoding S-adenosyl-L-methionine:phosphoethanolamine N-methyltransferase and methods for modulating lipid biosynthesis in plants](#)
- 6986908- [Delta-aminolevulinic acid for prevention and treatment of infection by pathogenic microorganisms and parasite](#)
- 7195917- [Methods for controlling gibberellin levels](#)
- 7208318- [Method for producing plants with suppressed photorespiration and improved CO.sub.2 fixation](#)
- 7332310- [Mutant of homoserine dehydrogenase from Corynebacterium and DNA encoding thereof](#)
- 7355029- [Genes encoding carbon metabolism and energy-producing proteins](#)
- 7355030- [Genes encoding carbon metabolism and energy-producing proteins](#)
- 7355031- [Genes encoding carbon metabolism and energy-producing proteins](#)
- 7368276- [Polynucleotide constructs encoding aspartate kinase, aspartate-semialdehyde dehydrogenase, and dihydrodipicolinate reductase and related constructs, products, and methods](#)
- 7381551- [Saccharomyces cerevisiae mutant](#)
- 7393675- [Corynebacterium glutamicum genes encoding proteins involved in carbon metabolism and energy production](#)
- 7396685- [Phase sensitively-detected reduced dimensionality nuclear magnetic resonance spectroscopy for rapid chemical shift assignment and secondary structure determination of proteins](#)
- 7410766- [Corynebacterium glutamicum genes encoding phosphoenolpyruvate: sugar phosphotransferase system proteins](#)
- 7425435- [Corynebacterium glutamicum genes encoding phosphoenolpyruvate: sugar phosphotransferase system proteins](#)
- 7320958- [Coleopteran-toxic polypeptide compositions](#)
- 7319026- [Amino acid-producing bacteria and a process for preparing L-amino acids](#)
- 7288694- [Methods for enhancing segregation of transgenes in plants and compositions thereof](#)
- 7208656- [Nucleotide sequences encoding anthonomous toxic polypeptides from Bacillus thuringiensis](#)
- 7211415- [Enterobacteriaceae strains over-expressing the yfiD gene for the fermentative production of L-amino acids](#)
- 7223567- [Mutant E. coli strain with increased succinic acid production](#)
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- 7273721- [Corynebacterium glutamicum genes encoding proteins involved in membrane synthesis and membrane transport](#)
- 7429454- [DNA probes useful in detecting .delta.-endotoxin-encoding sequences and uses thereof](#)

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