

L-Gulonolactone Oxidase

[View the current L-Gulonolactone Oxidase InDepth page on BioPortfolio.com \(PDF\)](#)

(http://www.bioportfolio.com/indepth/L-Gulonolactone_Oxidase.html) - Regularly Updated.

Recent Publications on L-Gulonolactone Oxidase:



- [Beta-catenin regulates vitamin C biosynthesis and cell survival in murine liver.](#)
Because the Wnt/beta-catenin pathway plays multiple roles in liver... 11th November, 2009
Department of Pathology, University of Pittsburgh School of Medicine,- J Biol Chem. 2009 Oct 9;284(41):28115-27. Epub 2009 Aug 18. ([DOI Direct Link](#))
- [Restoration of vitamin C synthesis in transgenic Gulo-/- mice by helper-dependent adenovirus-based expression of gulonolactone oxidase.](#)
Inability to synthesize vitamin C, because of a deficiency in... 8th September, 2009
Department of Biology, McMaster University, Hamilton, ON L8S 4K1, Canada.- Hum Gene Ther. 2008 Dec;19(12):1349-58. ([DOI Direct Link](#))
- [Vitamin C and the role of citrus juices as functional food.](#)
The literature on the content and stability of vitamin C (ascorbic acid,... 2nd July, 2009
Unidad Mixta JBT Corp.-IBMC, Instituto de Biología Molecular y Celular,- Nat Prod Commun. 2009 May;4(5):677-700.
- [Methionine supplementation accelerates oxidative stress and nuclear factor kappaB activation in livers of C57BL/6 mice.](#)
The present study was designed to investigate whether hyperhomocysteinemia... 6th February, 2009
Center of Smart Food & Drug, Biohealth Product Research Center and Food- J Med Food. 2008 Dec;11(4):667-74. ([DOI Direct Link](#))
- [Elevated oxidative stress and sensorimotor deficits but normal cognition in mice that cannot synthesize ascorbic acid.](#)
Oxidative stress is implicated in the cognitive deterioration associated... 16th September, 2008
Division of Diabetes, Endocrinology & Metabolism, Vanderbilt University,- J Neurochem. 2008 Aug;106(3):1198-208. Epub 2008 May 7. ([DOI Direct Link](#))
- [The planetary biology of ascorbate and uric acid and their relationship with the epidemic of obesity and cardiovascular disease.](#)
Humans have relatively low plasma ascorbate levels and high serum uric... 4th September, 2008
Division of Nephrology, Hypertension and Transplantation, University of- Med Hypotheses. 2008;71(1):22-31. Epub 2008 Mar 10. ([DOI Direct Link](#))
- [Vitamin C supplementation does not protect L-gulono-gamma-lactone oxidase-deficient mice from Helicobacter pylori-induced gastritis and gastric premalignancy.](#)
In human studies, low vitamin C intake has been associated with more... 1st February, 2008
Division of Comparative Medicine, Massachusetts Institute of Technology,- Int J Cancer. 2008 Mar 1;122(5):1068-76. ([DOI Direct Link](#))

- [Evaluation of gene expression profiling in a mouse model of L-gulonolactone oxidase gene deficiency.](#)
*Humans and guinea pigs are species which are unable to synthesize ascorbic...*3rd January, 2008
Department of Biology, University of Memphis, Memphis, TN, USA.- *Genet Mol Biol.* 2007;30(2):322-329.
- [Isolation and characterization of cDNA sequences of L-gulono-gamma-lactone oxidase, a key enzyme for biosynthesis of ascorbic acid, from extant primitive fish groups.](#)
*Most advanced teleosts lack L-gulono-gamma-lactone oxidase (GULO), a key...*14th December, 2007
Department of Aquaculture, Pukyong National University, Busan 608-737,- *Comp Biochem Physiol B Biochem Mol Biol.* 2007 Jun;147(2):178-90. Epub 2007 ([DOI Direct Link](#))
- [Ascorbate deficiency results in impaired neutrophil apoptosis and clearance and is associated with up-regulation of hypoxia-inducible factor 1alpha.](#)
*Some cells, including neutrophils, accumulate high intracellular ascorbate...*10th November, 2007
Free Radical Research Group, Pathology Department, Christchurch School of- *J Leukoc Biol.* 2007 May;81(5):1236-44. Epub 2007 Jan 30. ([DOI Direct Link](#))
- [Sexual difference in ascorbic acid synthesis, tissue ascorbic acid and plasma total antioxidant capacity in mature chickens.](#)
*1. An experiment was conducted with commercial White Leghorn type chickens...*1st November, 2007
Department of Animal and Veterinary Sciences, Clemson University, Clemson,- *Br Poult Sci.* 2007 Aug;48(4):519-23. ([DOI Direct Link](#))
- [Effect of chronic oxidative/corticosterone-induced stress on ascorbic acid metabolism and total antioxidant capacity in chickens \(Gallus gallus domesticus\).](#)
*The consequences of chronic corticosterone-induced stress (CCIS) on...*26th September, 2007
Department of Animal and Veterinary Sciences, Clemson University, Clemson,- *J Anim Physiol Anim Nutr (Berl).* 2007 Aug;91(7-8):355-60. ([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](#))
- [Vitamin C. Biosynthesis, recycling and degradation in mammals.](#)
*Vitamin C, a reducing agent and antioxidant, is a cofactor in reactions...*7th April, 2007
Universite Catholique de Louvain, Christian de Duve Institute of Cellular- *FEBS J.* 2007 Jan;274(1):1-22. ([DOI Direct Link](#))
- [Depletion of ascorbic acid restricts angiogenesis and retards tumor growth in a mouse model.](#)
*Angiogenesis requires the deposition of type IV collagen by endothelial...*14th March, 2007
Molecular Targets Program, Medical Oncology, James Graham Brown Cancer- *Neoplasia.* 2007 Jan;9(1):47-56.

L-Gulonolactone Oxidase Patents:



- 7579171- [Ascorbic acid production from yeast](#)
- 6469149- [Production of ascorbic acid in plants](#)
- 6407046- [Mutant EGIII cellulase, DNA encoding such EGIII compositions and methods for obtaining same](#)

- 6358715- [Production of ascorbic acid](#)
- 6187732- [Mutant EGIII cellulase, DNA encoding such EGIII compositions and methods for obtaining same](#)
- 5210217- [Substituted bithiophenes and dithienylpyrroles](#)
- 5035997- [Redox polymerization diagnostic test composition and method for immunoassay and nucleic acid assay](#)
- 4963368- [Oxidoreductase enzyme stabilized highly unsaturated fatty acids and derivatives of such acids](#)
- 4886625- [Functionalized conducting polymers and their use in diagnostic devices](#)
- 4721677- [Implantable gas-containing biosensor and method for measuring an analyte such as glucose](#)
- 4680268- [Implantable gas-containing biosensor and method for measuring an analyte such as glucose](#)
- 4655880- [Apparatus and method for sensing species, substances and substrates using oxidase](#)
- 4587100- [Multilayer analytical element for the detection of hydrogen peroxide](#)
- 4578245- [Multilayer analytical element](#)
- 4458686- [Cutaneous methods of measuring body substances](#)
- 6485947- [Production of lactate using crabtree negative organisms in varying culture conditions](#)
- 6500211- [Mutant EGIII cellulase, DNA encoding such EGIII compositions and methods for obtaining same](#)
- 6500649- [Process for the conversion of organic materials, particularly saccharide materials, comprising an enzymatic oxidation step in the presence of ruthenium or palladium](#)
- 7485298- [Diagnosis and treatment of human dormancy-related sequellae](#)
- 7455874- [Method for the fabrication of a biosensor comprising an enzyme electrode arrangement](#)
- 7439050- [Corynebacterium glutamicum genes encoding diaminopimelate epimerase](#)
- 7288120- [Synthesis of tetraazapentamethine compounds, and processes for dyeing keratin fibers using this synthesis](#)
- 7229805- [Methods for the synthesis of lactic acid using crabtree-negative yeast transformed with the lactate dehydrogenase gene](#)
- 7141410- [Methods and materials for the production of organic products in cells of Candida species](#)
- 7109010- [Methods and materials for the synthesis of organic products](#)
- 7078064- [Compositions and methods useful for treating and preventing chronic liver disease, chronic HCV infection and non-alcoholic steatohepatitis](#)
- 6824996- [Production of ascorbic acid](#)
- 6808918- [Production of ascorbic acid](#)
- 6726754- [Method for enzyme mediated removal of gas from inks, and reduced gas inks](#)
- 6630330- [Ascorbic acid production from yeast](#)
- 6582750- [Mutant EGIII cellulase, DNA encoding such EGIII compositions and methods for obtaining same](#)
- 6524812- [Genes encoding resistance to DNA alkylating agents](#)
- 4340448- [Potentiometric detection of hydrogen peroxide and apparatus therefor](#)

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 Stafford House, 10 Prince of Wales Road, Dorchester, Dorset, DT1 1PW, UK. No.3312883 VAT No. GB 744 6483 10

Copyright 1997-2009 - BioPortfolio Limited.

