

L-Gulonolactone Oxidase

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Recent Publications on L-Gulonolactone Oxidase:

- [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... 12th March, 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.
 - [Dietary ascorbic acid may be necessary for enhancing the immune response in Siberian sturgeon \(*Acipenser baerii*\), a species capable of ascorbic acid biosynthesis.](#)
*Siberian sturgeon (*Acipenser baerii* Brandt) is one of few fish species...*9th December, 2006
 Ministry of Education Key Laboratory of Biodiversity Science and- Comp Biochem Physiol A Mol Integr Physiol. 2006 Oct;145(2):152-7. Epub ([DOI Direct Link](#))
 - [Mycobacterium tuberculosis possesses a functional enzyme for the synthesis of vitamin C, L-gulonolactone dehydrogenase.](#)
*The last step of the biosynthesis of L-ascorbic acid (vitamin C) in plants...*4th November, 2006
 Laboratory of Mycobacterial Biochemistry, Pasteur Institute of Brussels,- FEBS J. 2006 Oct;273(19):4435-45. Epub 2006 Sep 5. ([DOI Direct Link](#))
 - [Vitamin C deficiency increases the lung pathology of influenza virus-infected gulo/- mice.](#)
*This study was designed to determine the effects of vitamin C deficiency...*28th October, 2006
 Department of Nutrition, University of North Carolina, Chapel Hill, NC- J Nutr. 2006 Oct;136(10):2611-6.
 - [Vitamin C fails to protect amino acids and lipids from oxidation during acute inflammation.](#)
*The observation that antioxidant vitamins fail to confer protective...*30th August, 2006
 Department of Surgery, Washington University, St. Louis, MO 63110, USA.- Free Radic Biol Med. 2006 May 1;40(9):1494-501. Epub 2006 Jan 6. ([DOI Direct Link](#))
 - [Ascorbic acid synthesis due to L-gulonolactone oxidase expression enhances NO production in endothelial cells.](#)
*As a primary antioxidant, ascorbic acid (AA) provides beneficial effects...*17th August, 2006
 Department of Molecular Medicine, Kyungpook National University School of- Biochem Biophys Res Commun. 2006 Jul 14;345(4):1657-62. Epub 2006 May 24. ([DOI Direct Link](#))

L-Gulonolactone Oxidase Patents:



- 7288120- [Synthesis of tetraazapentamethine compounds, and processes for dyeing keratin fibers using this synthesis](#)
- 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](#)
- 6407046- [Mutant EGIII cellulase, DNA encoding such EGIII compositions and methods for obtaining same](#)
- 6469149- [Production of ascorbic acid in plants](#)
- 6485947- [Production of lactate using crabtree negative organisms in varying culture conditions](#)
- 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](#)
- 6500649- [Process for the conversion of organic materials, particularly saccharide materials, comprising an enzymatic oxidation step in the presence of ruthenium or palladium](#)
- 6500211- [Mutant EGIII cellulase, DNA encoding such EGIII compositions and methods for obtaining same](#)
- 4340448- [Potentiometric detection of hydrogen peroxide and apparatus therefor](#)

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