

Aldehyde Reductase

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Recent Publications on Aldehyde Reductase:



- [Influence of the Isolation Procedure on Coriander Leaf Volatiles with Some Correlation to the Enzymatic Activity.](#)
Coriander leaves (Coriandrum sativum L.) have become popular worldwide... 18th November, 2009
Department of Food and Nutritional Sciences, Graduate School of Humanities- J Agric Food Chem. 2009 Nov 16. ([DOI Direct Link](#))
- [Aldose reductase inhibition suppresses the expression of Th2 cytokines and airway inflammation in ovalbumin-induced asthma in mice.](#)
Airway inflammation induced by reactive oxygen species-mediated activation... 17th November, 2009
Department of Biochemistry and Molecular Biology, University of Texas- J Immunol. 2009 Oct 1;183(7):4723-32. Epub 2009 Sep 14. ([DOI Direct Link](#))
- [Large scale reverse genetics in Arabidopsis: Case studies from the Chloroplast 2010 Project.](#)
Traditionally, phenotype-driven forward genetic plant mutant studies have... 13th November, 2009
Department of Biochemistry and Molecular Biology, Michigan State- Plant Physiol. 2009 Nov 11. ([DOI Direct Link](#))
- [Aldo-keto reductase family 1 member B10 promotes cell survival by regulating lipid synthesis and eliminating carbonyls.](#)
Aldo-keto reductase family 1 member B10 (AKR1B10) is primarily expressed... 7th November, 2009
Department of Medical Microbiology, SimmonsCooper Cancer Institute,- J Biol Chem. 2009 Sep 25;284(39):26742-8. Epub 2009 Jul 30. ([DOI Direct Link](#))
- [Charge density and electrostatic interactions of fidarestat, an inhibitor of human aldose reductase.](#)
The charge density and the topological features of fidarestat, an... 5th November, 2009
Laboratoire de Cristallographie, Resonance Magnetique et Modelisations- J Am Chem Soc. 2009 Aug 12;131(31):10929-41. ([DOI Direct Link](#))
- [\[Activity of aldehyde scavenger enzymes in the heart of rats of different age during immobilized stress\]](#)
This study was made to determine the activity of aldehyde scavenger... 3rd November, 2009
- Ukr Biokhim Zh. 2009 Jan-Feb;81(1):99-104.
- [Inhibition of aldose reductase by dietary antioxidant curcumin: mechanism of inhibition, specificity and significance.](#)
Accumulation of intracellular sorbitol due to increased aldose reductase... 24th October, 2009
Biochemistry Division, National Institute of Nutrition, Hyderabad 500 604,- FEBS Lett. 2009 Nov 19;583(22):3637-42. Epub 2009 Oct 20. ([DOI Direct Link](#))
- [Proteomic identification of aldo-keto reductase AKR1B10 induction after treatment of colorectal cancer cells with the proteasome inhibitor bortezomib.](#)

Targeting the ubiquitin-proteasome pathway with the proteasome inhibitor... 20th October, 2009
Department of Internal Medicine, Innsbruck Medical University, Innsbruck,- Mol Cancer Ther. 2009 Jul;8(7):1995-2006. Epub 2009 Jun 30. ([DOI Direct Link](#))

- [Pursuing aldose reductase inhibitors through in situ cross-docking and similarity-based virtual screening.](#)

Aldose reductase (ALR2) is a critical enzyme in the development of the... 15th October, 2009
Dipartimento di Chimica Farmaceutica e Tossicologica, Universita di Napoli- J Med Chem. 2009 Sep 24;52(18):5578-81. ([DOI Direct Link](#))

- [Inhibitors of aldose reductase and formation of advanced glycation end-products in moutan cortex \(*Paeonia suffruticosa*\).](#)

*The methanol extract of Moutan cortex (*Paeonia suffruticosa*) afforded two...* 15th October, 2009
College of Pharmacy, Chungnam National University, Daejeon 305-764, Korea.- J Nat Prod. 2009 Aug;72(8):1465-70. ([DOI Direct Link](#))

- [Potent and selective inhibition of the tumor marker AKR1B10 by bisdemethoxycurcumin: probing the active site of the enzyme with molecular modeling and site-directed mutagenesis.](#)

A human member of the aldo-keto reductase (AKR) superfamily, AKR1B10,... 9th October, 2009
Laboratory of Biochemistry, Gifu Pharmaceutical University, Gifu 502-8585,- Biochem Biophys Res Commun. 2009 Nov 6;389(1):128-32. Epub 2009 Aug 23. ([DOI Direct Link](#))

- [Oxidative stress and dysregulation of the taurine transporter in high-glucose-exposed human Schwann cells: implications for pathogenesis of diabetic neuropathy.](#)

In human Schwann cells, the role of taurine in regulating glucose-induced... 1st October, 2009
Dept. of Clinical and Experimental Medicine, Univ. of Birmingham,- Am J Physiol Endocrinol Metab. 2009 Sep;297(3):E620-8. Epub 2009 Jul 14. ([DOI Direct Link](#))

- [A novel NADPH-dependent aldehyde reductase gene from *Saccharomyces cerevisiae* NRRL Y-12632 involved in the detoxification of aldehyde inhibitors derived from lignocellulosic biomass conversion.](#)

Aldehyde inhibitors such as furfural, 5-hydroxymethylfurfural,... 1st September, 2009
U.S. Department of Agriculture, Agricultural Research Service, National- Gene. 2009 Oct 1;446(1):1-10. Epub 2009 Jul 3. ([DOI Direct Link](#))

- [Aldo-keto reductase family 1 B10 protein detoxifies dietary and lipid-derived alpha, beta-unsaturated carbonyls at physiological levels.](#)

Alpha, beta-unsaturated carbonyls are highly reactive mutagens and... 21st August, 2009
Department of Medical Microbiology, Immunology, & Cell Biology,- Biochem Biophys Res Commun. 2009 Sep 18;387(2):245-50. Epub 2009 Jun 27. ([DOI Direct Link](#))

- [Engineering the isobutanol biosynthetic pathway in *Escherichia coli* by comparison of three aldehyde reductase/alcohol dehydrogenase genes.](#)

Biofuels synthesized from renewable resources are of increasing interest... 18th July, 2009
Department of Chemical and Biomolecular Engineering, University of- Appl Microbiol Biotechnol. 2009 Jul 16. ([DOI Direct Link](#))

Aldehyde Reductase Clinical Trials:



- [Vitamin C Supplementation as a Preventive Treatment of Diabetic Peripheral Neuropathy](#)



Aldehyde Reductase Patents:

- 6964980- [Method of reducing serum glucose and triglyceride levels and for inhibiting angiogenesis using substitute indolealkanoic acids](#)
- 7112428- [Chlorohydrin and hydroxycarboxylic ester asymmetric hydrolase gene](#)
- 7118896- [Methods and compositions for modification of lipid biosynthesis](#)
- 7125693- [Enzymatic processes for the production of 4-substituted 3-hydroxybutyric acid derivatives](#)
- 7132267- [Enzymatic processes for the production of 4-substituted 3-hydroxybutyric acid derivatives and vicinal cyano, hydroxy substituted carboxylic acid esters](#)
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- 7189749- [Substituted phenoxyacetic acids](#)
- 7202069- [\(R\)-2-octanol dehydrogenases, methods for producing the enzymes, DNA encoding the enzymes, and methods for producing alcohols using the enzymes](#)
- 7256027- [Enzymes for the production of 2-keto-L-gulonic acid](#)
- 7276593- [Proteins and nucleic acids encoding same](#)
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- 7329422- [Pharmaceutical compositions](#)
- 7469185- [Primary rat hepatocyte toxicity modeling](#)
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