

Saccharopine Dehydrogenases

[View the current Saccharopine Dehydrogenases InDepth page on BioPortfolio.com](http://www.bioportfolio.com/indepth/Saccharopine_Dehydrogenases.html)

(http://www.bioportfolio.com/indepth/Saccharopine_Dehydrogenases.html)

Recent Publications on Saccharopine Dehydrogenases:



- [dLKR/SDH regulates hormone-mediated histone arginine methylation and transcription of cell death genes.](#)
*The sequential modifications of histones form the basis of the histone...*6th September, 2008
Hanson Institute, Institute of Medical and Veterinary Science, Adelaide SA- J Cell Biol. 2008 Aug 11;182(3):481-95. ([DOI Direct Link](#))
- [Overall kinetic mechanism of saccharopine dehydrogenase \(L-glutamate forming\) from *Saccharomyces cerevisiae*.](#)
*Kinetic studies were carried out for histidine-tagged saccharopine...*11th June, 2008
Department of Chemistry and Biochemistry, UniVersity of Oklahoma, 620- Biochemistry. 2008 May 13;47(19):5417-23. Epub 2008 Apr 17. ([DOI Direct Link](#))
- [Modifying lysine biosynthesis and catabolism in corn with a single bifunctional expression/silencing transgene cassette.](#)
*Although it is one of the major crops in the world, corn has poor...*26th February, 2008
Mystic Research, Monsanto Company, 62 Maritime Drive, Mystic, CT 06355,- Plant Biotechnol J. 2008 Jan;6(1):13-21. Epub 2007 Aug 28. ([DOI Direct Link](#))
- [Crystal structures of ligand-bound saccharopine dehydrogenase from *Saccharomyces cerevisiae*.](#)
*Three structures of saccharopine dehydrogenase (l-lysine-forming) (SDH)...*12th January, 2008
Department of Chemistry and Biochemistry, University of Oklahoma, 620- Biochemistry. 2007 Nov 6;46(44):12512-21. Epub 2007 Oct 16. ([DOI Direct Link](#))
- [Structural studies of the final enzyme in the alpha-amino adipate pathway-saccharopine dehydrogenase from *Saccharomyces cerevisiae*.](#)
*The 1.64 Å structure of the apoenzyme form of saccharopine dehydrogenase...*7th December, 2007
Department of Biochemistry, McGill University, Montreal, Quebec, Canada- J Mol Biol. 2007 Oct 26;373(3):745-54. Epub 2007 Aug 24. ([DOI Direct Link](#))
- [High-lysine corn generated by endosperm-specific suppression of lysine catabolism using RNAi.](#)
*Because of the limited lysine content in corn grain, synthetic lysine...*27th October, 2007
Mystic Research, Monsanto Company, 62 Maritime Drive, Mystic, CT 06355,- Plant Biotechnol J. 2007 Sep;5(5):605-14. Epub 2007 Jun 6. ([DOI Direct Link](#))
- [Determinants of substrate specificity for saccharopine dehydrogenase from *Saccharomyces cerevisiae*.](#)
*A survey of NADH, alpha-Kg, and lysine analogues has been undertaken in an...*30th August, 2007
Department of Chemistry and Biochemistry, University of Oklahoma, 620- Biochemistry. 2007 Jun 26;46(25):7625-36. Epub 2007 Jun 2. ([DOI Direct Link](#))
- [A proposed proton shuttle mechanism for saccharopine dehydrogenase from *Saccharomyces*](#)

[cerevisiae.](#)

*Saccharopine dehydrogenase [N6-(glutaryl-2)-L-lysine:NAD oxidoreductase...*6th March, 2007
Department of Chemistry and Biochemistry, University of Oklahoma, 620- Biochemistry. 2007 Jan
23;46(3):871-82. ([DOI Direct Link](#))

- [The lysine-ketoglutarate reductase-saccharopine dehydrogenase is involved in the osmo-induced synthesis of pipercolic acid in rapeseed leaf tissues.](#)
*Higher plant responses to abiotic stresses are associated with...*19th December, 2006
Plant Metabolism, Department of Plant Sciences, University of Cambridge,- Plant Physiol Biochem.
2006 Jul-Sep;44(7-9):474-82. Epub 2006 Aug 23. ([DOI Direct Link](#))
- [Novel lysine biosynthetic gene sequences \(LYS1 and LYS5\) used as PCR targets for the detection of the pathogenic Candida yeast.](#)
*We report here a sensitive and specific polymerase chain reaction (PCR)...*9th December, 2006
Department of Microbiology, Pearson Hall, Room 32, Miami University,- Appl Microbiol Biotechnol.
2006 Sep;72(2):416-20. Epub 2006 May 30. ([DOI Direct Link](#))
- [Overall kinetic mechanism of saccharopine dehydrogenase from Saccharomyces cerevisiae.](#)
*Kinetic data have been measured for the histidine-tagged saccharopine...*9th November, 2006
Department of Chemistry and Biochemistry, University of Oklahoma, 620- Biochemistry. 2006 Oct
3;45(39):12156-66. ([DOI Direct Link](#))
- [Transcriptional and bioinformatic analysis of the 56.8 kb DNA region amplified in tandem repeats containing the penicillin gene cluster in Penicillium chrysogenum.](#)
*High penicillin-producing strains of Penicillium chrysogenum contain 6-14...*6th October, 2006
Instituto de Biotecnologia de Leon (INBIOTEC) Science Park, Spain.- Fungal Genet Biol. 2006
Sep;43(9):618-29. Epub 2006 May 18. ([DOI Direct Link](#))
- [The alpha-amino adipate pathway for lysine biosynthesis in fungi.](#)
*This review provides a description of the biochemistry and enzymology of...*3rd October, 2006
Department of Chemistry and Biochemistry, University of Oklahoma, 620- Cell Biochem Biophys.
2006;46(1):43-64. ([DOI Direct Link](#))
- [Crystal structure of the his-tagged saccharopine reductase from Saccharomyces cerevisiae at 1.7-A resolution.](#)
*The three-dimensional structure of the saccharopine reductase enzyme from...*3rd October, 2006
Department of Chemistry and Biochemistry, University of Oklahoma, 620- Cell Biochem Biophys.
2006;46(1):17-26. ([DOI Direct Link](#))
- [Functional analysis through site-directed mutations and phylogeny of the Candida albicans LYS1-encoded saccharopine dehydrogenase.](#)
*Candida albicans LYS1-encoded saccharopine dehydrogenase (CaLys1p, SDH)...*3rd March, 2006
Department of Microbiology, Miami University, Pearson Hall, Room 46,- Mol Genet Genomics. 2006
Jan;275(1):74-80. Epub 2005 Nov 15. ([DOI Direct Link](#))

Saccharopine Dehydrogenases Patents:



- 7071383- [Chimeric genes and methods for increasing the lysine and threonine content of the seeds of plants](#)
- 6459019- [Chimeric genes and methods for increasing the lysine and threonine content of the seeds of plants](#)

- 5773691- [Chimeric genes and methods for increasing the lysine and threonine content of the seeds of plants](#)

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.

