

# Lactose Synthase

[View the current Lactose Synthase InDepth page on BioPortfolio.com](http://www.bioportfolio.com/indepth/Lactose_Synthase.html)  
([http://www.bioportfolio.com/indepth/Lactose\\_Synthase.html](http://www.bioportfolio.com/indepth/Lactose_Synthase.html))



## Recent Publications on Lactose Synthase:

- [Lactose Synthase Components in Milk: Concentrations of alpha-Lactalbumin and beta1,4-Galactosyltransferase in Milk of Cows from Several Breeds at Various Stages of Lactation.](#)  
*It is believed that milk production is determined by the number and...* 13th August, 2008  
Department of Animal Sciences, University of Illinois, Urbana, IL, USA.- *Reprod Domest Anim.* 2008 Aug 6. ([DOI Direct Link](#))
- [Sequence variation of the alpha-lactalbumin gene in Holstein and Nellore cows.](#)  
*The alpha-lactalbumin is a subunit of lactose-synthase, an enzyme...* 13th August, 2008  
Department of Animal Reproduction, Faculty of Veterinary Medicine,- *Anim Biotechnol.* 2008;19(3):194-8. ([DOI Direct Link](#))
- [Porcine beta1,4-Galactosyltransferase-I Sequence and Expression.](#)  
*beta1,4-Galactosyltransferase-I (B4GALT1), one of seven...* 5th August, 2008  
Department of Animal Sciences, University of Illinois at Urbana-Champaign,- *Reprod Domest Anim.* 2008 Jul 28. ([DOI Direct Link](#))
- [Evolution of Pinnipedia lactation strategies: a potential role for alpha-lactalbumin?](#)  
*Despite the considerable variation in milk composition found among...* 31st October, 2007  
CRC for Innovative Dairy Products, Department of Zoology, University of- *Biol Lett.* 2007 Oct 22;3(5):546-9. ([DOI Direct Link](#))
- [Structure and catalytic cycle of beta-1,4-galactosyltransferase.](#)  
*Beta-1,4-galactosyltransferase-1, a housekeeping enzyme that functions in...* 23rd March, 2005  
Structural Glycobiology Section, Laboratory of Experimental and- *Curr Opin Struct Biol.* 2004 Oct;14(5):593-600. ([DOI Direct Link](#))
- [A multinational study of alpha-lactalbumin concentrations in human milk.](#)  
*Alpha-lactalbumin, a 14-kD protein, plays a central biochemical role in...* 24th February, 2005  
Wyeth, 500 Arcola Road, Collegeville, PA 19426, USA.- *J Nutr Biochem.* 2004 Sep;15(9):517-21. ([DOI Direct Link](#))
- [A Mval PCR-RFLP detecting a silent allele at the goat alpha-lactalbumin locus.](#)  
*Alpha-lactalbumin, a 14-kD protein, plays a central biochemical role in...* 24th December, 2003  
Dipartimento di Scienze Zootecniche ed Ispezione degli Alimenti,- *J Dairy Res.* 2003 Aug;70(3):355-7.
- [alpha-Lactalbumin: structure and function.](#)  
*Small milk protein alpha-lactalbumin (alpha-LA), a component of lactose...* 15th July, 2000  
Institute for Biological Instrumentation of the Russian Academy of- *FEBS Lett.* 2000 May 19;473(3):269-74.
- [Specific inhibition of an alpha-galactosyltransferase from Trypanosoma brucei by synthetic substrate](#)

## analogues.

*Since the alpha-D-galactose-(1->3)-D-galactose epitope has been...* 24th June, 2000  
Physiologisch-chemisches Institut der Universitat Tubingen, Germany.- Glycoconj J. 1999  
Sep;16(9):537-44.

- [Beta1,4-galactosyltransferase and lactose biosynthesis: recruitment of a housekeeping gene from the nonmammalian vertebrate gene pool for a mammary gland specific function.](#)

*Beta 1,4-galactosyltransferase (beta4GalT-I) is a constitutively expressed...* 10th June, 2000  
Johns Hopkins University School of Medicine, The Cell Structure and- J Mammary Gland Biol  
Neoplasia. 1998 Jul;3(3):315-24.

- [Conversion of alpha-lactalbumin to a protein inducing apoptosis.](#)

*In this study alpha-lactalbumin was converted from the regular, native...* 20th May, 2000  
Department of Microbiology, Immunology and Glycobiology (MIG), Institute- Proc Natl Acad Sci U S A.  
2000 Apr 11;97(8):4221-6.

## Lactose Synthase Patents:



- 7374919- [UDP-galactose: .beta.-N-acetyl-glucosamine .beta.-1,4-galactosyltransferase, .beta.4Gal-T2](#)
- 5530177- [Transgenic mice producing bovine .alpha.-lactalbumin in their milk](#)
- 5618705- [Synthesis of anti-inflammatory compounds and novel trisaccharides useful in the synthesis of anti-inflammatory compounds](#)
- 5641668- [Proteins having glycosyltransferase activity](#)
- 5714587- [Synthesis of anti-inflammatory compounds, and novel trisaccharides useful in the synthesis of anti-inflammatory compounds](#)
- 5834251- [Methods of modifying carbohydrate moieties](#)
- 5850000- [Transgenic non-human mammals comprising a bovine 5' flanking regulatory sequence](#)
- 5869035- [Methods and compositions for inducing complement destruction of tissue](#)
- 6096870- [Sequential separation of whey](#)
- 6479469- [Treatment of arthritis and compositions therefore](#)
- 6558934- [UDP-galactose: .beta.-N-acetyl-glucosamine .beta.-1,4-galactosyl-transferase, .beta.4Gal-T2](#)
- 6599874- [Protein complex from ion-exchange chromatography of casein for treatment of bacterial infections](#)
- 6916649- [UDP-galactose: .beta.-N-acetyl-glucosamine .beta.-1,4-galactosyltransferase, .beta.4Gal-T2](#)
- 7053185- [Lactalbumin production process](#)
- 7071373- [Transgenic ungulate compositions and methods](#)
- 7115404- [UDP-galactose: .beta.-D-galactose-R 4-.alpha.-D-galac-tosyltransferase, .alpha.4Gal-T1](#)
- 7144855- [Protein complex from ion-exchange chromatography for treatment of bacterial infections](#)
- 5426178- [Synthesis of anti-inflammatory compounds, and novel trisaccharides useful in the synthesis of anti-inflammatory compounds](#)

\*\*\*

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.

