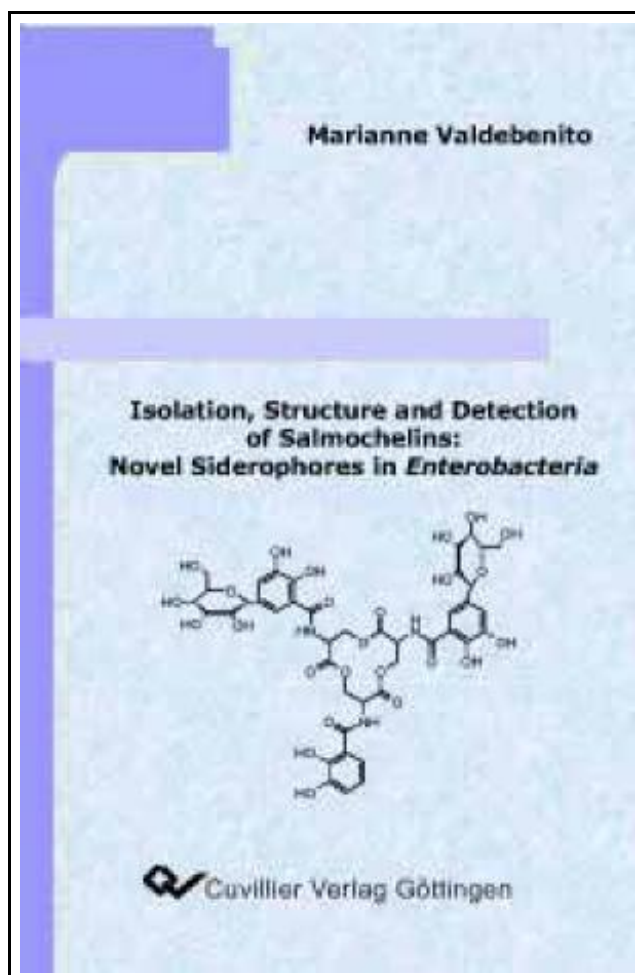


Isolation, Stucture and Detection of Salmochelins: Novel Siderophores in Enterobacteria



Filesize: 8.51 MB

Reviews

It is an awesome ebook which i actually have at any time read through. It usually fails to charge excessive. It is extremely difficult to leave it before concluding, once you begin to read the book.
(Dario Murazik IV)

ISOLATION, STRUCTURE AND DETECTION OF SALMOCHELINS: NOVEL SIDEROPHORES IN ENTEROBACTERIA

DOWNLOAD



Cuvillier Verlag Jan 2007, 2007. Taschenbuch. Book Condition: Neu. 208x147x7 mm. Neuware - Iron is an essential nutrient for most living microorganisms. To ensure accessibility of iron in their environment, under iron poor conditions, aerobic and facultative aerobic microorganisms synthesize and release into their environment highly selective low-molecular-mass iron chelating agents termed siderophores. In 1970, enterobactin (enterochelin), a triscatechol derivative of a cyclic triserine lactone, has been isolated from *Salmonella typhimurium* and *E. coli* strains. Later, in 2003 a novel siderophore called salmochelin has been isolated from *Salmonella enterica* serotype Typhimurium and uropathogenic *Escherichia coli* strains. Analytical data have shown that salmochelins are enterobactin-related compounds, which contain 2,3-dihydroxybenzoyl-L-serine and glucose connected in a linear (monomeric, dimeric, and trimeric) or cyclic form. The biosynthesis of salmochelins is dependent on the synthesis of enterobactin and the *iroBCDEN* gene cluster. Comparative analyses have shown that salmochelins are not bound to serum albumin, suggesting that salmochelins may play a crucial role in infections produced by *S. enterica* and uropathogenic *E. coli* strains. Salmochelin is taken up by IroN in a TonB-dependent manner. Two hydrolases are involved in salmochelins uptake, IroD and IroE. IroE protein is able to hydrolyze apo- and ferric-salmochelin S4 to salmochelin S2 and ferric-salmochelin S2, respectively. In addition, it was found that uptake of ferric-salmochelin S4 in *E. coli* was dependent on the cleavage by IroE, and that IroC was necessary for the uptake of ferric-salmochelin S2 from the periplasm into the cytoplasm. Finally, the hydrolysis products of salmochelin and yersiniabactin were detected, from uropathogenic *E. coli* strains either by HPLC connected to a fluorescence detector or by thin layer chromatography on cellulose plates. The efficiency of this novel detection method was tested with several clinical UPEC isolates containing the *iro* gene cluster. In all cases the fluorescent hydrolysis product...



[Read Isolation, Structure and Detection of Salmochelins: Novel Siderophores in Enterobacteria Online](#)



[Download PDF Isolation, Structure and Detection of Salmochelins: Novel Siderophores in Enterobacteria](#)

Related PDFs



Programming in D

Ali Cehreli Dez 2015, 2015. Buch. Book Condition: Neu. 264x182x53 mm. This item is printed on demand - Print on Demand Neuware - The main aim of this book is to teach D to readers...

[Download ePub »](#)



Leila: Further in the Life and Destinies of Darcy Dancer, Gentleman (Donleavy, J. P.)

Atlantic Monthly Press. PAPERBACK. Book Condition: New. 0871132885 12+ Year Old paperback book-Never Read-may have light shelf or handling wear-has a price sticker or price written inside front or back cover-publishers mark-Good Copy- I ship...

[Download ePub »](#)



My Brother is Autistic

Barron's Educational Series Inc.,U.S. Paperback. Book Condition: new. BRAND NEW, My Brother is Autistic, Jennifer Moore-Mallinos, Medical experts are just beginning to understand varying degrees of autism and its impact on both the autistic child...

[Download ePub »](#)



Children s Educational Book: Junior Leonardo Da Vinci: An Introduction to the Art, Science and Inventions of This Great Genius. Age 7 8 9 10 Year-Olds. [Us English] (Paperback)

Createspace, United States, 2013. Paperback. Book Condition: New. 254 x 178 mm. Language: English . Brand New Book ***** Print on Demand *****.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to...

[Download ePub »](#)



Children s Educational Book Junior Leonardo Da Vinci : An Introduction to the Art, Science and Inventions of This Great Genius Age 7 8 9 10 Year-Olds. [British English] (Paperback)

Createspace, United States, 2013. Paperback. Book Condition: New. 248 x 170 mm. Language: English . Brand New Book ***** Print on Demand *****.ABOUT SMART READS for Kids . Love Art, Love Learning Welcome. Designed to...

[Download ePub »](#)

**It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em**

HarperCollins Publishers. Paperback. Book Condition: new. BRAND NEW, It's Just a Date: How to Get 'em, How to Read 'em, and How to Rock 'em, Greg Behrendt, Amiira Ruotola-Behrendt, A fabulous new guide to dating

[Save eBook »](#)

**Patent Ease: How to Write You Own Patent Application (Paperback)**

Createspace, United States, 2014. Paperback. Book Condition: New. 229 x 152 mm. Language: English . Brand New Book ***** Print on Demand *****.Patent Ease! The new How to write your own Patent book for beginners!

[Save eBook »](#)

**A Smarter Way to Learn JavaScript: The New Approach That Uses Technology to Cut Your Effort in Half (Paperback)**

Createspace, United States, 2014. Paperback. Book Condition: New. 251 x 178 mm. Language: English . Brand New Book ***** Print on Demand *****.The ultimate learn-by-doing approachWritten for beginners, useful for experienced developers who want to

[Save eBook »](#)

**Electronic Dreams: How 1980s Britain Learned to Love the Computer**

Audible Studios on Brilliance, United States, 2016. CD-Audio. Book Condition: New. Unabridged. 170 x 135 mm. Language: English . Brand New. Remember the ZX Spectrum? Ever have a go at programming with its stretchy rubber

[Save eBook »](#)

**Would It Kill You to Stop Doing That?**

Book Condition: New. Publisher/Verlag: Little, Brown Book Group | A Modern Guide to Manners | A laugh-out-loud guide to modern manners by acclaimed humorist, author, and Vanity Fair columnist Henry Alford. | A few years

[Save eBook »](#)