

Accepted Manuscript

Title: Structural characterization and anticancer activity of extracellular polysaccharides from ascidian symbiotic bacterium *Bacillus thuringiensis*

Authors: Ramamoorthy Sathishkumar, Gnanakan Ananthan, S. Lakshmana Senthil, Meivelu Moovendhan, Jeganathan Arun



PII: S0144-8617(18)30205-4
DOI: <https://doi.org/10.1016/j.carbpol.2018.02.047>
Reference: CARP 13309

To appear in:

Received date: 29-1-2018
Revised date: 15-2-2018
Accepted date: 16-2-2018

Please cite this article as: Ramamoorthy, Sathishkumar., Gnanakan, Ananthan., S.Lakshmana, Senthil., Meivelu, Moovendhan., & Jeganathan, Arun., Structural characterization and anticancer activity of extracellular polysaccharides from ascidian symbiotic bacterium *Bacillus thuringiensis*. *Carbohydrate Polymers* <https://doi.org/10.1016/j.carbpol.2018.02.047>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

*Research Article***Structural characterization and anticancer activity of extracellular polysaccharides from ascidian symbiotic bacterium *Bacillus thuringiensis***

**Ramamoorthy Sathishkumar ^{a*}, Gnanakan Ananthan^a, S. Lakshmana Senthil^a,
Meivelu Moovendhan^b, Jeganathan Arun ^c**

^a Centre of Advanced Study in Marine Biology, Faculty of Marine Sciences,
Annamalai University, Parangipettai, 608 502, Tamil Nadu, India.

^b Bioengineering and Drug Design Laboratory, Department of Biotechnology,
Bhupat and Jyoti Mehta School of Biosciences, Indian Institute of Technology, Chennai-600036,
Tamil Nadu, India

^c Department of Natural Resources and Waste Recycling, School of Energy, Environment and
Natural Resources, Madurai Kamaraj University, Madurai, 625021, Tamil Nadu, India.

***Corresponding Author**

Dr. Ramamoorthy Sathishkumar
CAS in Marine Biology, Faculty of Marine Sciences
Annamalai University, Parangipettai, 608 502.

Tamil Nadu, India.

Mail id: sathishkumarmicro@gmail.com

Contact: +919791396614

Highlights

- EPS production was statistically optimized by RSM method
- This the first evidence of EPS production from ascidian symbiotic bacteria
- Fructose and Galactose were recorded as major sugars
- Structural features of EPS were studied through spectroscopy techniques

Download English Version:

<https://daneshyari.com/en/article/7782918>

Download Persian Version:

<https://daneshyari.com/article/7782918>

[Daneshyari.com](https://daneshyari.com)