

Accepted Manuscript

Title: Development of the Intein-mediated method for production of recombinant Thymosin β 4 from the acetylated *in vivo* fusion protein

Author: Roman S. Esipov Dmitry A. Makarov Vasily N. Stepanenko Anatoliy I. Miroshnikov



PII: S0168-1656(16)30074-8
DOI: <http://dx.doi.org/doi:10.1016/j.jbiotec.2016.02.021>
Reference: BIOTEC 7415

To appear in: *Journal of Biotechnology*

Received date: 26-8-2015
Revised date: 9-2-2016
Accepted date: 12-2-2016

Please cite this article as: Esipov, Roman S., Makarov, Dmitry A., Stepanenko, Vasily N., Miroshnikov, Anatoliy I., Development of the Intein-mediated method for production of recombinant Thymosin *rmbeta*4 from the acetylated *in vivo* fusion protein. *Journal of Biotechnology* <http://dx.doi.org/10.1016/j.jbiotec.2016.02.021>

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.

Development of the Intein-mediated method for production of recombinant Thymosin β 4 from the acetylated *in vivo* fusion protein

Roman S. Esipov, Dmitry A. Makarov, Vasily N. Stepanenko, Anatoliy I. Miroshnikov

M.M. Shemyakin and Yu.A. Ovchinnikov Institute of bioorganic chemistry of the Russian Academy of Sciences, GSP-7, Miklukho-Maklaya str. 16/10, 117997, Moscow, Russian Federation

Corresponding Author: Roman S. Esipov esipov@ibch.ru

Dmitry A. Makarov youngchemist@mail.ru

Vasily N. Stepanenko svn@ibch.ru

Anatoliy I. Miroshnikov aiv@ibch.ru

Highlights

The cleavage reaction took place only in the presence of the thiol reagent

The most efficient acetylation of the peptide was observed in the producer strain constructed on the basis of the *E. Coli* C3030 strain

The efficiency of the protein post-translational acetylation exceeded 90%

The serine acetyltransferase had a higher specificity with respect to thymosin β 4

The method developed is straightforward and economically viable

Download English Version:

<https://daneshyari.com/en/article/6490534>

Download Persian Version:

<https://daneshyari.com/article/6490534>

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