

Přírodovědecká Jihočeská univerzita v Českých Budějovicích University of South Bohemia of Science in České Budějovice

SUPERVISOR'S STATEMENT ON BACHELOR THESIS

Name of the student:

Armig Kabrelian

Study program:

Biological Chemistry

Department/Institute:

Institute of Chemistry

Thesis title:

Antiviral activity of selected IFN-β-stimulated genes

Supervisor:

Martin Selinger

Supervisor's affiliation:

Institute of Chemistry, Faculty of Science; Institute of Parasitology, Biology

Centre of CAS

	Point scale ¹	Points
(1) FORMAL REQUIREMENTS		
Formal and graphical quality of the thesis	0-3	1.5
Ability to work with literature	0-3	2
Language and stylistics	0-3	1.5
Formal requirements – points in total		5
(2) PRACTICAL REQUIREMENTS		
Fulfillment of the aims	0-3	2
Ability to understand the results, their interpretation, and clarity of the results, discussion, and conclusions	0-3	2
Discussion quality – interpretation of results and their discussion with the literature	0-3	1.5
Experimental difficulty of the thesis, independence in experimental work	0-3	2
Contribution of the thesis to the knowledge in the field and the possibility to publish the results (after eventual supplementary experiments)	0-3	2
Practical requirements – points in total		9.5
POINTS IN TOTAL (MAX/AWARDED)	24	14.5

¹ Mark as: 0-unsatisfactory, 1-satisfactory, 2-average, 3-excellent.

Comments of the supervisor on the student and the thesis:

Armig's thesis was aimed on analysis of antiviral effects of two IFN- β -stimulated genes against the tick-borne encephalitis virus infection in human neural cells – IFI6 and IFI 27. These two candidate antiviral genes were identified in a previous study performed in our laboratory.

The original idea was based on the use of the Gateway cloning system for preparation of suitable expression vectors and verification of potential antiviral effects of the two selected genes. The Gateway system was used based on our previous experience with similar experiments. However, most results were negative, most probably due to lack of expression of the studied proteins. Next, transfection of mRNA encoding the two proteins was performed, but the antiviral effect was still not visible.

The whole course of the work was affected by Armig's lack of time for work in the laboratory and also loss of her results. Writing of the thesis could be also better, some of the formatting issues outlasted in the thesis even though were explained several times. This resulted in a bit lower quality of the thesis.

Conclusion:

In conclusion, Armig Kabrelian successfully applied several methods for analysis of potential antiviral effects of IFI 6 and IFI27 against tick-borne encephalitis virus infection and I

recommend/ do not recommend

the thesis for the defense.

In České Budějovice date 17. 9. 2018

Signature