

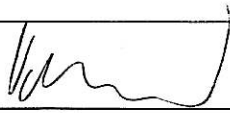
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| Téma diplomové práce | Anti-adhesion activity of bovine whey oligosaccharides against Neisseria meningitidis |
| Jméno studenta, studentky | Barbora Janůšová |
| Jméno vedoucího diplomové práce | PharmDr. Kateřina Vávrová, Ph.D. |

I. Posudek vedoucího diplomové práce

Barbora Janůšová vypracovala svou diplomovou práci na Univerzitě Kuopio. Posudek školitelky je přiložen.

Navrhovaná klasifikace **v ý b o r n ě**

V Hradci Králové dne 5. června 2006


Podpis vedoucího diplomové práce

Review of Thesis of Science Diploma Master Student Barbora Janušová
Anti-adhesion activity of bovine whey oligosaccharides against Neisseria meningitidis

(67 pages, Kuopio 2006)

Barbora Janušová visited University of Kuopio as an exchange student under the EU Socrates/Erasmus program from September 1st 2005 to January 23rd 2006. During this period she worked in my research group at the Department of Pharmaceutical Chemistry and completed her Master Thesis: "Anti-adhesion activity of bovine whey oligosaccharides against *Neisseria meningitidis*". Her study is part of our research project funded by the National Technology Agency of Finland.

The aim of this study was to isolate whey oligosaccharides from bovine whey and to separate them into neutral and acidic oligosaccharides based on analyses of total hexose and sialic acid contents. The inhibitory activity of different fractions of bovine whey oligosaccharides against binding activity *Neisseria meningitidis* type IV pili was measured by employing in vitro test system developed in our laboratory. The results of this work have led for more detailed studies on biological activity of bovine whey oligosaccharides and glycoconjugates. The thesis is written attentively and carefully reviewing the latest literature and has good structure to be published. The thesis shows that Barbora is able to scientific thinking and problem solving of her own.

Barbora appears to be very skilful and diligent student. She has become comfortable in using the techniques and scientific equipment normally found in a modern laboratory. She is adept in culturing of pathogenic bacteria, isolation and labeling of bacterial structures. She has learned to work with oligosaccharide fractionation and microtiter well assays employed in bacterial adhesion and inhibition studies *in vitro*. She has demonstrated the ability to work in a research project individually. I would consider her productivity as excellent. Barbora has proved to be very highly motivated and intelligent student with positive attitude about science. She is positive and open minded person and gets well along and cooperates with other people, including scientist, technical personal and students.

Classification: 1



In Kuopio 31st May 2006

Carina Tikkanen-Kaukanen, Ph.D

Senior Scientist