

Téma diplomové práce	Analysis of farnesylated peptides and proteins using LC-MS
Jméno studenta, studentky	Filip Hessler
Jméno vedoucího diplomové práce	Prof. Seppo Auriola, PhD Prof. RNDr, Karel Waisser, DrSc.

I. Posudek vedoucího diplomové práce

Mr Filip Hessler did his master thesis at Department of Pharmaceutical Chemistry, University of Kuopio under my supervision. The task was rather challenging, to develop a new mass spectrometry based identification method for screening of prenylated peptides. The work involved both some synthesis of farnesylated model peptides, modification of cysteine groups in proteins by farnesylation, separation of peptides with HPLC, and structural analysis of peptides by mass spectrometry. The major success of the work was finding of selective marker ions for identification of prenylated peptides in complicated samples.

The work was performed well, and Mr Hessler had good skills in the laboratory work. During the work he learned also basics of protein analysis with mass spectrometry, both in theory and practice.

Prof. Seppo Auriola, PhD

Kuopio, Finland

Filip Hessler po absolvování laboratorního cvičení z organické chemie začal pracovat v mé pracovní skupině jako volontér. Byl nadšeným organickým chemikem. Jako pracovní úkol se měl zabývat přípravou potenciálních antituberkulotik ze skupiny 1-aryl-5-benzylsulfonyltetrazolů a 1-aryl-5-benzylsulfinyltetrazolů. Měl navázat na práci PharmDr. J. Adamce, PhD. a výzkumné zaměření doc. PharmDr. A. Hrabálka, CSc. Protože se mu naskytla příležitost vypracovat diplomovou práci ve Finsku, změnit zaměření a zabývat se hmotnostními spektry peptidů a syntézou poptidových modelů pod vedením prof. Seppo Auriola, PhD. Podle posudku jeho finského školitele v obtížné tematice si zdárně počínal.

Prof. RNDr. Karel Waisser, DrSc.

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

V Hradci Králové dne 30. 9. 2008

Podpis vedoucího diplomové práce

To Faculty of Pharmacy at Charles University, Praha

Report on Filip Hessler's master thesis "Analysis of farnesylated peptides and proteins using LC-MS"

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The marking of the thesis is excellent.

Kuopio, Finland
16th September 2008

Seppo Auriola, PhD, Prof
Department of Pharmaceutical Chemistry
University of Kuopio
Finland