



UNIVERZITA KARLOVA
Farmaceutická fakulta
v Hradci Králové

Zápis o části státní závěrečné zkoušky Obhajoba diplomové práce

Akademický rok: 2022/2023

Jméno a příjmení studenta: Nechirwan Taimur Abdalrahman, B.Sc.
Identifikační číslo studenta: 72877955

Typ studijního programu: navazující magisterský
Studijní program: Pharmaceutical Sciences
ID studia: 721885

Název práce: Design, synthesis and evaluation of heterocyclic compounds with potential antimicrobial activity VI
Pracoviště práce: Department of Pharmaceutical Chemistry and Pharmaceutical Analysis (16-16190)

Jazyk práce: angličtina
Jazyk obhajoby: English
Vedoucí: doc. PharmDr. Jan Zitko, Ph.D.
Oponent(i): doc. PharmDr. Veronika Nováková, Ph.D.
Datum obhajoby: 14.09.2023 **Místo obhajoby:** Hradec Králové
Termín: řádný

Průběh obhajoby: Using a PowerPoint presentation, the student presented the committee with the key results of his diploma thesis. In the introduction, he discussed tuberculosis and aminoacyl-tRNA synthetases as antimicrobial targets. Then, the student described the synthetic work performed and summarized the biological results of compounds prepared in the project compared to previously published analogues. In the end, he also presented results of in silico simulations of the binding of prepared compounds to mycobacterial prolyl-tRNA synthetase and discussed why in silico results did not correlate with antimycobacterial activity. After the presentation, the supervisor doc. Zitko read his evaluation. Subsequently, doc. V. Nováková read her opponent's evaluation. Both evaluations were generally positive. The student answered all questions of the opponent, and the opponent was satisfied with the answers. In general discussion, dr. Demuth asked whether a specific compound used in the design of the series comes from the in-house laboratory or was found in the literature. Dr. Demuth also asked why only some compounds were biologically tested and whether the testing is still in the process. Prof. Zimčík asked for the main protomer of one of the presented derivatives and required the student's opinion on the disagreement between in silico predicted binding to prolyl-tRNA synthetase and the absence of whole-cell antimycobacterial activity. The student's answers were logical and proved his knowledge of the topic. Therefore, the committee decided that the thesis was successfully defended.

Výsledek obhajoby: výborně (1)

Předseda komise: prof. PharmDr. Petr Zimčík, Ph.D.

Členové komise: doc. PharmDr. Radim Kučera, Ph.D.

doc. PharmDr. Jan Zitko, Ph.D.