Research for a Life without Cancer

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## To Whom it may concern

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## Letter of recommendation for Felix Romer

Felix Romer worked in the GPCF Unit Antibodies from April 2021 until March 2022. During his 1-year stay in our lab he contributed to two different projects.

From March until September he focused on the validation of KRASb specific antibodies within the scope of a practical study semester. The monoclonal antibodies were already available and Felix's task was to examine the antibody specificity by overexpression of NRAS, HRAS, KRASa and KRASb. For such experiments he had first to clone the cDNAs into corresponding expression vectors. In addition, he set up experiments that allowed testing the detection of endogenous KRASb. Upon his carefully conducted experiments we had to learn that the KRASb specific antibodies cannot be used in immunofluorescence and immunohistochemistry as they cross reacted with other proteins.

The second project that was part of his bachelor thesis ran from October 2020 until March 2021. The goal was to generate BRAF V600K specific monoclonal antibodies that can be used in immunohistochemistry on formalin-fixed, paraffin-embedded tissue. The mouse hybridoma technology where lymphocytes are fused with myeloma cells was applied to generate monoclonal antibodies. Felix was responsible for the screening of mother clones by immunoblotting, immunofluorescence and immunohistochemistry followed by additional testing of subclones. Finally, several monoclonal antibodies with the requested assay applicability were available and he initiated first validation experiments.

When Felix arrived in my lab, he was highly motivated and very interested to contribute to our projects. During his stay he conducted many molecular, cell biological and biochemical methods:

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Deutsche Bundesbank Karlsruhe IBAN: DE39 6600 0000 0067 0019 02 BIC (SWIFT): MARK DEF 1660 Research for a Life without Cancer

- DNA cloning using the Gateway system
- DNA propagation in bacteria (transformation, DNA purification)
- RNA isolation, cDNA synthesis, PCR
- Genomic DNA isolation
- Cell culture work including transfection
- SDS-PAGE, immunoblotting
- Immunofluorescence
- Immunohistochemistry

He was very quick in learning these new techniques and within a couple of days he performed the experiments mostly on his own. In addition, he started to read background literature to get more information about the techniques used and the research projects he was contributing to. Moreover, at the end of the bachelor thesis he gave an excellent presentation and wrote an outstanding report. His thesis was graded with the best mark (1.0).

Felix has excellent communication skills and his pleasant manner made him popular with the rest of the staff. He is a model student and it was a pleasure to have him in my lab. I give him my highest recommendation without reservation.

With regards

Prof. Dr. Ilse Hofmann

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