IMG

Institute of Molecular Genetics
of the Czech Academy of Sciences

Regular Wednesday IMG seminar

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CZ-OPENSCREEN

"Small molecules inducing erythropoiesis"

Recombinant human erythropoietin (EPO) or its biosimilar variants are widely used for treatment of anemia caused by chronic kidney disease already for decades. The treatment is efficient but has also its drawbacks which include high costs, inconvenient route of application (intravenous) and occasional severe side effects including generation of antibodies against EPO. Therefore, there is ongoing search for small molecule substituent for EPO that would be able to efficiently trigger erythropoiesis, but would be cheaper to produce and delivered to patients in more convenient way (orally). We developed a high-throughput assay for sensitive detection of hemoglobin production in hematopoietic cells and screened a library of small molecules for potential inducers of erythropoiesis. We identified several molecules that could induce differentiation of precursors into erythrocytes in the absence of EPO and we are currently in process of characterizing their modes of action.

The seminar will be held

on Wednesday 5th October 2022 at 15:00

in the Milan Hašek Auditorium at IMG

(Institute of Molecular Genetics of the Czech Academy of Sciences, Vídeňská 1083, Prague 4)