

TIPQMed

Targeted Improvement of Therapeutic Protein Quality Through Cell Culture Media

Institute for Applied Biotechnology (IAB)

Project leader Prof. Dr. Friedemann Hesse

Researcher Dr. Mohammed Milhim

Financing EU

Program EUROSTARS

Partners Florabio Tek. San. ve Tic. A. S. | GlycoMScan B.V. | PAIA Biotech GmbH

Duration 2020 – 2022

Project description Ensuring the quality of biopharmaceuticals, e.g. antibodies in cell culture production is one of the biggest challenges in the biopharmaceutical industry today. The quality of the product is determined by characteristics named Critical Quality Attributes (CQAs). Protein glycosylation, aggregation and charge variants are some of the important parameters that determine the quality of the product.

The CQAs of a recombinant antibody are known to depend on a lot of factors in the cell culture process and which are interconnected. Therefore, finding the right cell culture conditions and the optimal medium composition is a challenge.

In this project we aim to develop cell culture media that allow targeted modification of the glycosylation as one of the main CQAs. This will be achieved by systematic evaluation of combinations of cell culture compounds, which have been carefully preselected based on their involvement in metabolic pathways and their impact on glycosylation.

INSTITUT

IAB

PROJEKT

PROmiGlyKAN

ANSPRECHPARTNER/IN

Prof. Dr. Friedemann Hesse



TIPQMed: Platform for high-throughput purification of samples for glycan analysis.

INSTITUT
PROJEKT
ANSPRECHPARTNER/IN

IAB
PROmiGlyKAN
Prof. Dr. Friedemann Hesse