

Press Release

REACTION BIOLOGY AND 4HF BIOTEC ANNOUNCE BIOINFORMATIC CELL SERVICE

Freiburg, Germany
October 19, 2020

Reaction Biology, a drug discovery CRO with offices in Pennsylvania and Germany, and 4HF Biotec GmbH, a bioinformatics firm based in Freiburg, Germany, today announced a new cell-based service offering. The new service combines Reaction Biology's ProLiFiler cell assay service with 4HF's Biomarker Analysis and MOA Finder tools. 4HF Biotec has built a comprehensive database including data from more than 1,800 preclinical samples comprising multiple cancer datasets that are integrated into a single platform for visualization and statistical analysis. The data relevant for the Biomarker Analysis Tool are mutations (whole-exome sequencing), gene copy numbers, and gene expression data. The MoA Finder tool aims to identify the mode of action (MoA) of the test compound by comparing the sensitivity profile of the drug candidate to that of known drugs.

Results of Reaction Biology's 140 cell line assay will be put through both tools of Biomarker Analysis and MOA Finder to give customers a comprehensive understanding of their drug candidates. For Biomarker Analysis, a correlation analysis is performed for each cell line to determine the correlation of the drug sensitivity to each gene with regard to the expression level, mutation status, and/or somatic copy number. For MoA Finder, the test compound's sensitivity profile is compared to more than 700 drugs for which the Mode of Action is known.

"This will give our customers deep insight into the likely genetic response to the drug candidates they test with us," said Dr. Haiching Ma, Chief Science Officer of Reaction Biology. "A cell profile study can shine a spotlight on what a compound is doing, but combining that with 4HF's bioinformatics creates a roadmap for our customers' further development."

"Seeing the phenotypic effects of a compound is only half the information required for an informed drug discovery decision," said Dr. Vincent Vuaroqueaux, CSO of 4HF. "Our bioinformatic approach to building an oncological drug response profile will provide the other half. The Reaction Biology platform is the perfect application for our data analytics."

The service will be performed at Reaction Biology's labs, collaborating with 4HF for analysis. Both companies' labs are in Freiburg.

About Reaction Biology: Founded in 2001, the company provides a full suite of preclinical drug discovery services to over 1600 customers worldwide. It maintains lab facilities in Malvern PA and Freiburg Germany, with sales offices in the US, Germany, France, the UK, Japan, and China. www.reactionbiology.com

About 4HF Biotec: 4HF Biotec GmbH was founded in June 2015 by Prof. Dr. H.H. Fiebig. The company is specialized in bioinformatics and data analytics for discovery of innovative therapies to treat cancers. Its team includes experts in medical oncology, anticancer drug evaluation, genomics and bioinformatics. www.4hfbiotec.com

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