

NEWS

EVOSEP ADDS AUTOMATION TO ITS STANDARDIZED PLATFORM

Making proteomics 100x more robust and 10x faster

Cancun, Mexico – HUPO 2022 - (December 5th, 2022). Today, at the 21st Human Proteome Organization World Congress, Evosep launches new separation methods and a protocol for automated loading of Evotips enabling end-to-end high throughput proteomics workflows.

Automated end-to-end workflows for proteomics

For a widespread adaptation of proteomics in the clinic, the entire workflow from sample preparation through to LC-MS and data analysis needs to be fast and robust to enable the required throughput and quality. Therefore, we introduce a fully automated Evotip loading protocol facilitating end-to-end workflow starting from proteins to tryptic peptides loaded on Evotips and suitable to clinical cohort of patient plasma samples.

Faster chromatography with up to 500 samples analyzed per day now available

Faster chromatographic methods enable larger cohort studies and drive demand for automated sample preparation workflows. Therefore, we have developed a robust method enabling analysis of 500 samples per day with 2.2 minutes gradient time and a total cycle time of 2.9 minutes. Running the 500 SPD method on the Evosep One for plasma proteomics analysis, an average of 300 proteins were identified from each sample with low median CVs of 5%, providing a platform for processing large cohorts.

Robust and high-throughput single cell proteomics now available with Whisper 80 SPD

Single cell proteomics is a rapidly growing field where cutting-edge technologies are continuously pushed to the limit. The Evosep One represents a powerful platform for high sensitivity work including single cell proteomics. Recent advancements and optimization of Whisper™ Flow technology combined with a new generation Evotip provide efficient capture and recovery of peptides from especially low sample amounts down to the single cell level. The new Whisper 80 SPD method doubles the throughput for single cell analysis on the Evosep One with an attractive tradeoff between proteome coverage and speed of separation.





Protein identifications with Whisper 40 SPD almost doubled

As a result of intense collaborations with leading instrument providers, Evosep is presenting market-leading results at the conference, mapping of single cell proteomes with a coverage of up to 3.500 proteins, pushing the boundaries of the protein level insight achievable across heterogeneous cell populations.

"The new methods and automation protocols are released as a free software upgrade to our customers and line up with our goals of providing fast and robust end-to-end proteomics workflow paving the way for proteomics based healthcare", says Dr. Nicolai Bache, Head of Application Development at Evosep.

###

For more information about the Evosep One and Evotips, please refer to www.evosep.com.

Alternatively, please call: +45 2633 2021, or e-mail to: info@evosep.com

About Evosep

Evosep aims to improve quality of life and patient care by radically innovating protein based clinical diagnostics, initially through collaborations with world-leading scientists about developing new technologies and solutions to make sample separation 100 times more robust and 10 times faster than todays' alternatives. Information about Evosep is available at www.evosep.com.

The Evosep One instrument is for Research Use Only (RUO).

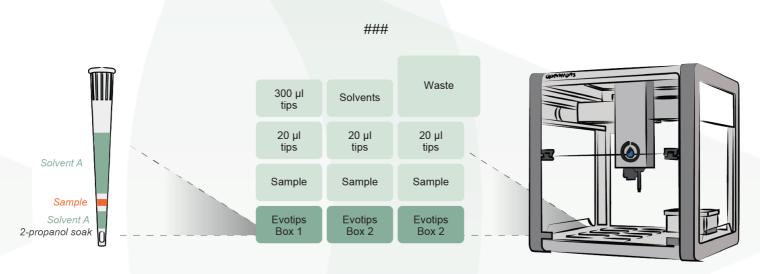


Figure 1: End-to-end automated Evotip workflow