Press Release



Vivlion® launches fixed-pair Alexandria, a genome-wide PRCISR™ CRISPR library with unmatched accuracy and precision

Accelerating drug discovery by CRISPR-based screening technologies

FRANKFURT, GERMANY – December 11, 2024 – Vivlion GmbH, a leader in CRISPR-based screening technologies, today announced the launch of its new flagship fixed-pair Alexandria PRCISR™ CRISPR library. Engineered by Vivlion's proprietary 3Cs platform technology, this pooled genome-wide Cas9 knockout library delivers industry-leading uniformity, efficiency, and gene coverage, setting new standards in CRISPR screening. Due to its unique design, it delivers predefined pairs of guide RNAs (gRNAs) to individual cells, maximizing editing efficiency while cutting experimental demands in half.

Key features of Vivlion's PRCISR™ CRISPR fixed-pair Alexandria:

- Comprehensive target coverage: 20,908 human genes (including 99.6% of all protein-coding genes of ENSEMBL 113)
- Innovative fixed-pair format: each construct contains two gRNAs targeting the same gene
- Maximal diversity: two constructs per gene, 41,951 pairs of gRNAs in total (including controls)
- Superior uniformity: library distribution skew of 2.22
- Innovative Cas9 gRNA selection: gRNAs are selected based on phenotype consistency
- Read-out flexibility: supports dropouts, enrichments, and single-cell phenotypes
- Integrated quality control concept: safe-harbor and non-targeting gRNAs, ensuring screening quality and data integrity

"Vivlion's fixed-pair Alexandria library is engineered to support a wide range of applications, including gene function studies, disease modeling, and therapeutic target discovery", explains Martin Wegner, Head of R&D and Customer Solutions at Vivlion. "Its comprehensive design and high-performance in pools and single cells significantly increase the genetic search space and make it an indispensable tool for academic and industrial R&D."

All PRCISR™ CRISPR libraries are made with Vivlion's cutting-edge PCR- and cloning-free 3Cs technology, ensuring highly uniform gRNA distributions and facilitating at-scale CRISPR screening while reducing experimental workload and enhancing data quality.

Vivlion's single, fixed-pair, and multiplex libraries, in combination with its CRO services for CRISPR screening, sequencing, and computational analyses, position Vivlion as the ideal partner for commercial R&D programs to accelerate drug developments.

About Vivlion: Vivlion GmbH specializes in CRISPR screening solutions that drive biomedical research and innovation. PRCISR™ CRISPR is based on the proprietary PCR-free 3Cs technology developed at Goethe University Frankfurt, Germany, and includes next-generation gene editing solutions and advanced gRNA libraries enabling highly efficient and combinatorial CRISPR screens. For more information, please visit www.vivlion.com.