

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

Accelerating drug discovery by CRISPRbased screening technologies

FRANKFURT, GERMANY, December 11, 2024 /EINPresswire.com/ -- 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 pre-defined 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 as controls, 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 highperformance 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,



Dr. Martin Wegner, Head of R&D and Customer Solutions

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

٢

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." research and innovation. PRCISR[™] CRISPR is based on the proprietary PCR-free 3Cs technology developed at Goethe University Frankfurt, Germany, and includes nextgeneration gene editing solutions and advanced gRNA libraries enabling highly efficient and combinatorial CRISPR screens.

For more information, please visit <u>www.vivlion.com</u>

Dr. Martin Wegner

Dr. Kerstin Koch Vivlion GmbH +49 69 26951900 This press release can be viewed online at: https://www.einpresswire.com/article/764206395

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire[™], tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2024 Newsmatics Inc. All Right Reserved.