Herlev, Denmark, October 1st 2020 - For immediate release

Samplix CRISPR Validation Services – In-Depth Validation of CRISPR-engineered Samples by the Xdrop™ Experts

Samplix launched a new service to inject transparency into today's cutting-edge gene editing technology, CRISPR. The service team receives, handles and manages samples of engineered genomes. Using Xdrop™ Indirect Sequence Capture, they enrich long DNA fragments that contain a carefully designed Detection Sequence placed 5–10 kb from the CRISPR edited site. They then sequence the enriched DNA as long reads on the Oxford Nanopore sequencer and as short reads on an Illumina platform to reconstruct in detail any structural rearrangements, SNPs or other unintended modifications.

Xdrop™ is Samplix' proprietary technology to enrich genomic regions longer than 100 kb from as little as 1 ng genomic DNA and with single-molecule resolution. Unlike other target enrichment methods, Xdrop™ requires knowledge of only a short sequence within or flanking the target region for efficient target selection. Following targeted selection, multiple displacement amplification is applied to single DNA molecules compartmentalized in droplets. This ensures unbiased amplification of large DNA fragments that are representative of the target variation in the original sample.

"Our R&D team was able to demonstrate that Xdrop™ can characterize unintended deletions and rearrangements occurring during CRISPR editing that go undetected with commonly used validation methods. We felt it was important to help researchers avoid methodological traps that might hide the broader outcome of their editing. Our new services bring that transparency to any lab," explains VP Commercial Operations Henrik Pfundheller.

The same expert team of scientists and lab technicians with over 10 years of experience in international genomics services, handling of precious sample types, project logistics, and dedicated customer care also manages the CRISPR-based projects. In collaboration with Samplix R&D, they have established robust protocols and operating procedures to ensure the highest-quality results and unequivocal insights.

"The Service team is in a unique position," continues Pfundheller. *"They collaborate with our customers, steadily exchanging ideas about how and where Xdrop™ can be implemented. They know the technology; they know the needs. And with its application in validating CRISPR results, they provide tremendous value to researchers worldwide."*

For more information, please visit **www. samplix.com/crispr-services.**

ABOUT SAMPLIX

Samplix offers proprietary products for PCR-free single-molecule target selection of genomic regions. Samplix' technologies are based on advanced microfluidics, which in a simple work process, partitions millions of molecules into droplets, thereby enabling high-quality, unbiased targeted enrichment of large fragments (>100 kb) for subsequent sequencing.

Samplix ApS
Mileparken 28
DK – 2730 Herlev

cvr: 32 30 93 21
bank: 3409 0011673171