Cytosurge launches cell line engineering services based on proprietary FluidFM® technology

Zurich, March 30, 2022 – Cytosurge, a global leader in precision single cell manipulation, today announced the launch of FluidFM® CellEDIT, a CRISPR cell line engineering service based on its FluidFM® technology.

Genetically engineered cell lines have become an invaluable tool in biological research and drug discovery. Nobel-prize winning CRISPR technology has opened up multiple opportunities for generating genome-edited cell lines to be used as disease models, which help the understanding of the biology underlying normal and disease-related traits. Despite significant advances, technical challenges such as delivery of the required CRISPR reagents into a cell remain.

Cytosurge's FluidFM® technology provides a significant improvement in CRISPR applications. By combining microfluidics with force control, FluidFM® enables gentle injection of any soluble cargo into single cells. FluidFM® therefore avoids the current limitations of standard transfection methods and allows the application of CRISPR technology even in sensitive, hard-to-transfect cells, such as stem cells (iPSCs) and primary cells. In addition, as it works without the need for vectors, multiplex editing becomes possible in a single step.

"Current methods are limited as the cells often do not survive the transfection method or the vectors become too complex and too large for efficient transfection. With FluidFM® we are able to introduce any soluble cargo gently into the cell, enabling genome edits to be carried out to a degree and with cells not seen before. In addition, FluidFM® allows full control over the amount and ratio of the CRISPR reagents reaching the cell and we can therefore optimize the system for higher quality and lower off-target effects," said Tobias Beyer, Chief Scientific Officer of Cytosurge.

The new FluidFM® CellEDIT Service particularly addresses the needs of scientists in pharmaceutical research and drug discovery, and of academic research labs looking to carry out genome edits beyond their current capacity and capabilities. While Cytosurge has been offering its FluidFM® technology for several years through the sale of instruments, this new service makes the technology available to a broader customer base without requiring expensive investment in additional capital equipment.

Pascal Behr, CEO of Cytosurge, commented: "We anticipate significant growth for our service business following the launch of FluidFM® CellEDIT. We are investing heavily in this side of the business, increasing funding, recruiting additional specialists, and installing larger facilities. We are confident that we have with our FluidFM® technology intrinsic advantages in both quality and speed compared to other cell line engineering suppliers, and we have a major opportunity both to increase market share and to drive new areas of demand."

Tobias Beyer, Cytosurge's Chief Scientific Officer, is attending the NextGen Omics US conference, March 29 - 30, 2022, and will today, March 30, 09:20 - 09:50am EST, for the first time hold a presentation about the novel FluidFM® CellEDIT Service. Find more information here.

For more information, please contact:

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Cytosurge AG

Cytosurge, a Swiss-based global leader in precision single cell manipulation, was founded in 2009 by scientists at the Swiss Federal Institute of Technology (ETH Zurich).

Besides developing, manufacturing, and distributing state-of-the-art systems for single cell research, Cytosurge now also offers a service for engineered cell lines based on its patented FluidFM® technology. FluidFM® technology enables gentle and direct cell manipulation such as direct intra-nuclear delivery of CRISPR RNP and therefore is especially suited for sensitive cells and complex edits.

Worldwide, more than 100 laboratories are already using FluidFM® solutions, pushing conventional technological boundaries in CRISPR cell line development, mechanobiology, virology, single cell omics, neuroscience, and nanoprinting.

For more information, visit www.cytosurge.com.