Fluidigm Introduces Single-Cell Total RNA Sequencing Applications for C1

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New single-cell protocols available for full-length, whole transcriptome sequencing using microfluidics technology

SOUTH SAN FRANCISCO, Calif., Sept. 27, 2018 (GLOBE NEWSWIRE) -- Fluidigm Corporation, a leader in mass cytometry and microfluidics technologies, today announced two new total RNA sequencing applications for the C1™ system. Available on Script Hub™, these single-cell workflows provide basic and translational researchers with powerful new tools to deeply characterize unique cellular subtypes and functional states.

Single-cell genomics is transforming our understanding of cellular diversity. Although initial advances have relied primarily on the measurement of protein-coding messenger RNAs (mRNAs), it is well-known that non-coding RNAs (ncRNAs) are also instrumental in regulating cell function and represent an exciting and growing class of diverse molecules that can control gene expression at both the transcriptional and post-transcriptional levels.

Using microfluidics technology, Fluidigm developed the C1 Total RNA Seq application to enable simultaneous detection of mRNAs and ncRNAs at single-cell resolution. Offered in conjunction with a bioinformatics pipeline, this full-length RNA sequencing application enables researchers to deeply characterize newly identified cell subpopulations in a more comprehensive and cost-effective manner than profiling mRNA alone.

“The C1 Total RNA Seq workflow will enable deep characterization of single cells downstream of cell atlasing studies, providing more biological information about each individual cell than with ultrahigh-throughput end counting methods,” said Dr. Sarah Teichmann, Head of Cellular Genetics at the Wellcome Sanger Institute.

Providing a second and complementary method for single-cell total RNA sequencing on the C1, the random displacement amplification sequencing (RamDA-seq) application offers a comprehensive view of total RNA. It enables researchers to study RNA processing events and transcriptional regulation at single-cell resolution by enabling highly sensitive detection of full-length mRNAs and non-poly(A) transcripts. Developed by Dr. Tetsutaro Hayashi and Dr. Itoshi Nikaido of the Riken Center for Biosystems Dynamics Research, the RamDA-seq method was published this year in the journal *Nature Communications*.

“RamDA-seq enables an understanding of single-cell localities such as non-poly(A) RNAs, pre-mRNAs and enhancer RNAs,” said Hayashi. “This will be invaluable to researchers working with rare cells in cancer biology, neurobiology and immune biology.”

“We are excited to bring comprehensive total RNA sequencing to single-cell research,” said Chris Linthwaite, President and CEO of Fluidigm. “We look forward to powering new insights in our understanding of health and disease.”

About Fluidigm
Fluidigm (NASDAQ:FLDM) develops, manufactures, and markets life science analytical and preparatory systems for markets such as mass cytometry, high-throughput genomics, and single-cell genomics. We sell to leading academic institutions, clinical research laboratories, and pharmaceutical, biotechnology, and agricultural biotechnology companies worldwide. Our systems are based on proprietary microfluidics and multiparameter mass cytometry technology and are designed to significantly simplify experimental workflow, increase throughput, and reduce costs while providing excellent data quality. Fluidigm products are provided for Research Use Only. Not for use in diagnostic procedures.

We use our website (www.fluidigm.com), corporate Twitter account (@fluidigm), Facebook page (https://www.facebook.com/fluidigm), and LinkedIn page (https://www.linkedin.com/company/fluidigm-corporation) as channels of distribution of information about our products, our planned financial and other announcements, our attendance at upcoming investor and industry conferences, and other matters. Such information may be deemed material information, and we may use these channels to comply with our disclosure obligations under Regulation FD. Therefore, investors should monitor our website and our social media accounts in addition to following our press releases, SEC filings, public conference calls, and webcasts.

Forward-Looking Statement for Fluidigm
This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, among others, statements regarding the anticipated benefits of newly introduced products and the growth and potential of single-cell biology research. Forward-looking statements are subject to numerous risks and uncertainties that could cause actual results to differ materially from currently anticipated results, including but not limited to risks relating to challenges inherent in developing, manufacturing, launching, marketing, and selling new products; potential product performance and quality issues; intellectual property risks; and competition. Information on these and additional risks and uncertainties and other information affecting Fluidigm business and operating results is contained in Fluidigm’s Annual Report on Form 10-K for the year ended December 31, 2017, and in its other filings with the Securities and Exchange Commission, including the Fluidigm Quarterly Report on Form 10-Q for the quarter ended June 30, 2018. These forward-looking statements speak only as of the date hereof. Fluidigm disclaims any obligation to update these forward-looking statements except as may be required by law.

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