



PacBio Launches HiFiViral SARS-CoV-2 Kit and Microbial Whole Genome Sequencing Enhancements to Combat Infectious Disease and Strengthen Public Health Response to Pathogen Threats

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Robust SARS-CoV-2 sequencing kit and upgraded microbial whole genome assembly workflow enable public health laboratories to scale pathogen surveillance programs

MENLO PARK, Calif., Nov. 16, 2021 (GLOBE NEWSWIRE) -- [PacBio](#) (Nasdaq: PACB), a leading provider of high-quality, highly accurate sequencing platforms, today announced the launch of the [HiFiViral SARS-CoV-2 Kit](#) – a fully kitted end-to-end solution for COVID-19 surveillance, which public health laboratories can use to identify new SARS-CoV-2 variants and detect all variants circulating within a population.

The HiFiViral SARS-CoV-2 Kit is PacBio's first kitted solution for genomic surveillance of COVID-19 variants. The assay leverages PacBio's trusted HiFi sequencing to give researchers a more complete view of novel mutations of all types, ensuring that emerging variants are captured.

"Accurate and timely detection of new variants of concern is critical to protecting public health. Our new HiFiViral SARS-CoV-2 Kit is a powerful solution that enables robust detection of new variants as they emerge without requiring periodic updates and revalidation to keep pace with the evolving SARS-CoV-2 virus," said Christian Henry, Chief Executive Officer and President of PacBio. "As we look to the future and continue to invest in applications to improve human health, this solution offers a differentiated technology based on proven HiFi sequencing and helps address workflow and supply chain bottlenecks that have affected SARS-CoV-2 surveillance efforts to date, enabling laboratories to scale their testing with ease."

The HiFiViral SARS-CoV-2 workflow is a cost-effective and accurate method for viral sequencing, utilizing molecular inversion probes (MIPs) that provide significant workflow improvements over traditional polymerase chain reaction (PCR) amplicon-based methods. HiFi sequencing also enables laboratories to identify multiple virus types present within a single sample. The companion SMRT Link v10.2 software provides a simplified solution to perform quality checks on experiments and capture all types of genetic variation, which is critical information for public health surveillance efforts. Combined with the flexibility to run up to 384 samples at a time, this kit allows more labs to take advantage of powerful HiFi sequencing in the convenience of a ready-to-use kit.

"With the HiFiViral SARS-CoV-2 workflow, we were able to capture mutations of all types and saw significant performance improvements over our PCR amplicon approach. The workflow itself was phenomenal. We were able to reduce the hands-on time by almost 80 percent which was a game changer for us," said Melissa Smith, Ph.D., Assistant Professor, Department of Biochemistry & Molecular Genetics, University of Louisville.

Concurrently with the HiFiViral SARS-CoV-2 kit, PacBio is releasing an enhanced end-to-end HiFi microbial whole genome assembly application and companion SMRT Link software on the Sequel IIe System. The upgrade doubles the recommended multiplexing capacity, provides 96 kitted barcodes, and migrates the application to HiFi sequencing while continuing to deliver the industry's leading standard for reference quality microbial genomes. This updated application gives public health labs a new and improved tool for investigating outbreaks in the food supply, tracking antimicrobial resistance, and fully characterizing emerging pathogen threats. Paired with the new HiFiViral SARS-CoV-2 kit, these innovations provide public health and microbial research labs a powerful menu of applications to service a broad range of use cases on their Sequel IIe systems.

"We are committed to supporting labs on the front line of this pandemic by providing easier, scalable, and more cost-effective solutions for pathogen surveillance. The launch of the HiFiViral SARS-CoV-2 kit, the upgrade to our microbial whole genome sequencing application, and the suite of SMRT Link companion software solutions are evidence of PacBio's commitment to helping labs respond to infectious diseases today and in the future," said Henry.

The HiFiViral SARS-CoV-2 kit is currently shipping. The components for the HiFi microbial whole genome assembly application will ship this quarter.

To learn more, please visit the PacBio website: [HiFiViral SARS-CoV-2 Kit](#) and [HiFi Microbial WGS application](#).

About Pacific Biosciences

Pacific Biosciences of California, Inc. (NASDAQ: PACB), is empowering life scientists with highly accurate long-read sequencing. The company's innovative instruments are based on Single Molecule, Real-Time (SMRT[®]) Sequencing technology, which delivers a comprehensive view of genomes, transcriptomes, and epigenomes, enabling access to the full spectrum of genetic variation in any organism. Cited in thousands of peer-reviewed publications, PacBio[®] sequencing systems are in use by scientists around the world to drive discovery in human biomedical research, plant and animal sciences, and microbiology. For more information, please visit www.pacb.com and follow [@PacBio](#).

PacBio products are provided for research use only. Not for use in diagnostic procedures.

Forward-Looking Statements

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outbreaks in the food supply, tracking antimicrobial resistance and characterizing emerging pathogen threats; ability and ease for laboratories to scale testing; potential to address supply bottlenecks; and other future events. Readers are cautioned not to place undue reliance on these forward-looking statements because they are subject to known and unknown risks and uncertainties that could cause actual results to differ materially from the information expressed or implied by forward-looking statements made in this press release. Reported results should not be considered as an indication of future performance. Factors that could materially affect actual results can be found, and readers are strongly encouraged to read the full cautionary statements contained, in PacBio's most recent filings with the Securities and Exchange Commission, including its most recent reports on Forms 8-K, 10-K, and 10-Q. These forward-looking statements speak only as of the date hereof, and PacBio disclaims any obligation to update these forward-looking statements, even if new information becomes available.

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