

Advanced Library Amplification Mix Delivers Superior NGS Data Quality

[London, 05 April 2023] — PCR Biosystems has launched a new proofreading polymerase mix for NGS library preparation workflows. VeriFi™ Library Amplification Mix combines the powerful and robust performance of VeriFi™ Hot Start Polymerase with greatly reduced GC-dependent bias to push the limits of NGS data. Guaranteeing quality when sequencing long and complex targets, VeriFi™ Library Amplification Mix delivers market-leading performance for precise PCR. Now, with VeriFi™ Library Amplification Mix, researchers can be more confident than ever before that they are acquiring superior quality sequencing datasets containing a higher number of unique reads.

NGS enables researchers to quickly sequence entire genomes and transcriptomes of organisms. This technology unlocks insights into complex biological processes, ultimately enabling the development of targeted treatments and more effective vaccines and contributing to a better understanding of the natural world. Library amplification is a critical step of PCR-based NGS workflows. However, PCR is susceptible to GC bias, which compromises the quality of sequencing libraries and in turn negatively impacts resulting data quality. Researchers, therefore, typically look to reduce GC bias during NGS library amplification, so they can be confident in the insights they elucidate from the data generated.

VeriFi™ Library Amplification Mix has been specially engineered to reduce GC-bias. Incorporating the proven VeriFi™ Hot Start Polymerase with Aptalock™ hot start technology, the mix also utilises proprietary chemistry to minimise GC-bias and enable reliable amplification for sequencing workflows. Having undergone rigorous testing on Illumina® platforms, the mix was shown to have minimal bias, even during amplification at extremes of GC content ranging from 30%-70%.

In an external, blind experiment with three market-leading competitors, the researcher running the study picked VeriFi™ Library Amplification Mix as the best performing and said it would be their mix of choice. They reported that using the VeriFi™ mix allowed the detection of 2% more unique reads, which translates to 80,000-25,000,000 unique reads, depending on the sequencing platform. More unique reads are a significant benefit, leading to greater target sequence coverage in whole genome sequencing studies and more accurate quantitative information, thereby making RNA-Seq experiments more informative.

“Empowering researchers to advance their research and unlock new insights is the driving force behind everything we do at PCR Biosystems,” stated Alex Wilson, Co-founder and Business Development Manager, PCR Biosystems. “And we are proud that we have developed this cutting-

edge mix, which is cost-effective and will truly benefit researchers, giving them more and better data when undertaking costly and laborious NGS experiments.”

In addition to delivering new levels of performance, VeriFi™ Library Amplification Mix is also easy to use. Its 2x mix format helps to simplify the workflow by reducing the pipetting required, ultimately helping to improve reproducibility.

To speak to a member of the team and request free samples, visit the PCR Biosystems stand (B3-10 1A), at ECCMID 2023 on 15-18 April, or booth 662 at AACR 2023 on 16-19 April, where experts will be on hand to advise scientists on incorporating the mix into their specific application and instrument set-up. Alternatively, request a sample [here](#) or visit [our website](#) today.

About PCR Biosystems

PCR Biosystems is a leading developer of PCR reagents for molecular biology research, diagnostics and NGS. The company offer a wide range of solutions including high-performance polymerases, thermostable reverse transcriptases, lyophilisable and air-dryable reagents and proprietary hot start technologies to maximise yield and sensitivity from the simplest to most challenging of reactions.

Founded by two PCR experts in 2012, the company believes scientists deserve better performance and value from their PCR reagents. The service provided is a core priority too. Alongside a broad range of standard and custom solutions, PCR Biosystems offers free samples, bulk supply, OEM manufacturing and tailored technical support to help customers achieve the most from their market-leading reagents.

In addition, as an ISO-13485 certified company, customers can have the assurance that the products developed meet the design and manufacturing standards for medical device components.

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