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PCR biosystems launch advanced Bst Polymerase reagents

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For accelerated DNA and RNA amplification



PCR Biosystems, the UK-based specialists in DNA and RNA analysis, have launched a range of IsoFast™ Bst Polymerase reagents for rapid, robust and sensitive DNA and RNA amplification. Through its nucleic acid strand displacement capabilities, Bst polymerase eliminates the need for the high-temperature denaturation step associated with traditional Taq enzymes. This enables faster time to result and facilitates DNA and RNA amplification in the field without specialised thermocycling equipment.

The new range of IsoFast Bst reagents from PCR Biosystems can be used for a variety of techniques including whole genome amplification, multiple displacement amplification and isothermal amplification. Such techniques have important applications in sectors ranging from environmental and food pathogen testing to clinical diagnostics and next generation sequencing. Scientists performing DNA and RNA amplification using IsoFast Bst Polymerase can benefit from consistent results over a wide dynamic range and sensitivities down to 3 copies of target DNA (10fg).

To continue PCR Biosystems's support of the global fight against COVID-19, the Bst Polymerase reagents have been validated for the qualitative detection of the SARS-CoV-2 nucleic acid. Combined with the reagents' suitability for use in the field, this validation opens the potential for rapid SARS-CoV-2 testing in environments such as airports, hospitals or care homes, without the need for a central laboratory, delivering results in 30 minutes and supporting initiatives for community or regular testing to safeguard public health. Sensitivities down to 12 copies of SARS-CoV-2 targets can be achieved, providing confidence in the quality and accuracy of results.

The IsoFast Bst range is available in flexible formats, with 2X mix formats streamlining set up for high throughput applications and components available separately for those customers wanting to optimise the reaction for their specific needs. Furthermore, the reagents are offered with optional fluorescent dyes, facilitating real-time amplification tracking.