Special Issue

Novel Detection Methods of Loop-Mediated Isothermal Amplification (LAMP) Products

Message from the Guest Editor

Loop-mediated isothermal amplification (LAMP) is becoming an increasingly popular alternative to polymerase chain reaction (PCR) for molecular diagnostics, with significantly different features and detection strategies. For example, the polymerase typically used in LAMP—usually Bst polymerase—lacks 5' to 3' exonuclease activity, making the hydrolysis probes used in PCR unsuitable for LAMP. Furthermore, common detection methods in LAMP, such as turbidity measurements, colorimetric changes, or intercalating fluorescent dyes, lack specificity. Consequently, distinguishing correct products from non-specific amplification, such as primer dimers, can be challenging. This Special Issue aims to cover novel detection methods for LAMP reactions, especially those which specifically detect correct products.

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