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Optimizing the Effect of Additives on qPCR Detection

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Abstract

Optimizing qPCR reactions has two key objectives: (1) to handle a wider range of samples, and (2) to minimize variability between replicates. [Anonymous 2009; Minas K., et al. 2011; Nolan T., et al. 2006]. Anecdotal evidence suggests that certain additives can enhance the PCR reactions and other DNA- and RNA-polymerase-based reactions, resulting in the detection of even smaller quantities of nucleic acids with higher confidence [Villalava C., et al. 2001; Rapley R., et al. 1994]. Although several mechanisms of action for these additives have been evoked, their effect on a particular assay cannot be predicted and must be determined experimentally. At the end of this protocol, we provide a table with some additives that may improve PCR-based reaction.

Attachments



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