

Rapid and Culture-Independent Detection of Staphylococcus Aureus by PCR Based Protocols

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Abstract : Staphylococcus aureus is one of the most commonly found pathogenic bacteria and is hard to eliminate from the human environment. It is responsible for many nosocomial infections, besides being the main causative agent of food intoxication by virtue of its variety of enterotoxins. Routine detection of S. aureus in food is usually carried out by traditional methods based on morphological and biochemical characterization. These methods are time-consuming and tedious. In addition, misclassifications with automated susceptibility testing systems or commercially available latex agglutination kits have been reported by several workers. Consequently, there is a need for methods to specifically discriminate S. aureus from other staphylococci as quickly as possible. Data on protocols developed using molecular means like PCR technology will be presented for rapid and specific detection of this pathogen in food, clinical and environmental samples, especially milk.

Keywords : food Pathogens, PCR technology, rapid and specific detection, staphylococcus aureus

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