

### Multiplex and quantitative pathogen detection using MLPA-CE-SSCP

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Food safety is a global health goal and the foodborne diseases take a major crisis on health. Therefore, detection of microbial pathogens in food is the solution to the prevention and recognition of problems related to health and safety. Conventional bacterial detection methods such as culture and colony counting methods may take up to a few days to yield an answer. Obviously this is inadequate, and recently many researchers are focusing towards the progress of rapid methods. Here, we demonstrate the rapid method which multiplex pathogen detection method based on capillary electrophoresis-single strand conformation polymorphism(CE-SSCP) coupled with multiplex ligation-dependent probe amplification (MLPA). Using ten foodborne pathogens as a model set, all the four MLPA-CE-SSCP steps were carefully optimized to precisely quantify by MLPA-CE-SSCP. We could obtain the results which illustrate a strong potential in clinical diagnosis, food safety, and biosafety.