



Multiplex-polymerase chain reaction tube



Product Feature

- Multiplex-polymerase chain reaction tube (m-PCR tube) is micro-tube that suitable for thermal cycle machine. This tube was combined with dry reagent mixtures for ready-to-use simultaneous detection of *Salmonella* spp., *Bacillus cereus*, and *Staphylococcus aureus* by multiplex-polymerase chain reaction.
- m-PCR tube can use by adding DNA template which extract from homogenize food solution and sterile water then take it to thermal cycle machine for amplification target DNA fragments. The gel electrophoresis and visualized using a UV trans-illuminator were used for result analysis.
- Dry reagents of m-PCR tube are stable for two months stored at 4°C and for one month stored at 25°C.



Innovation

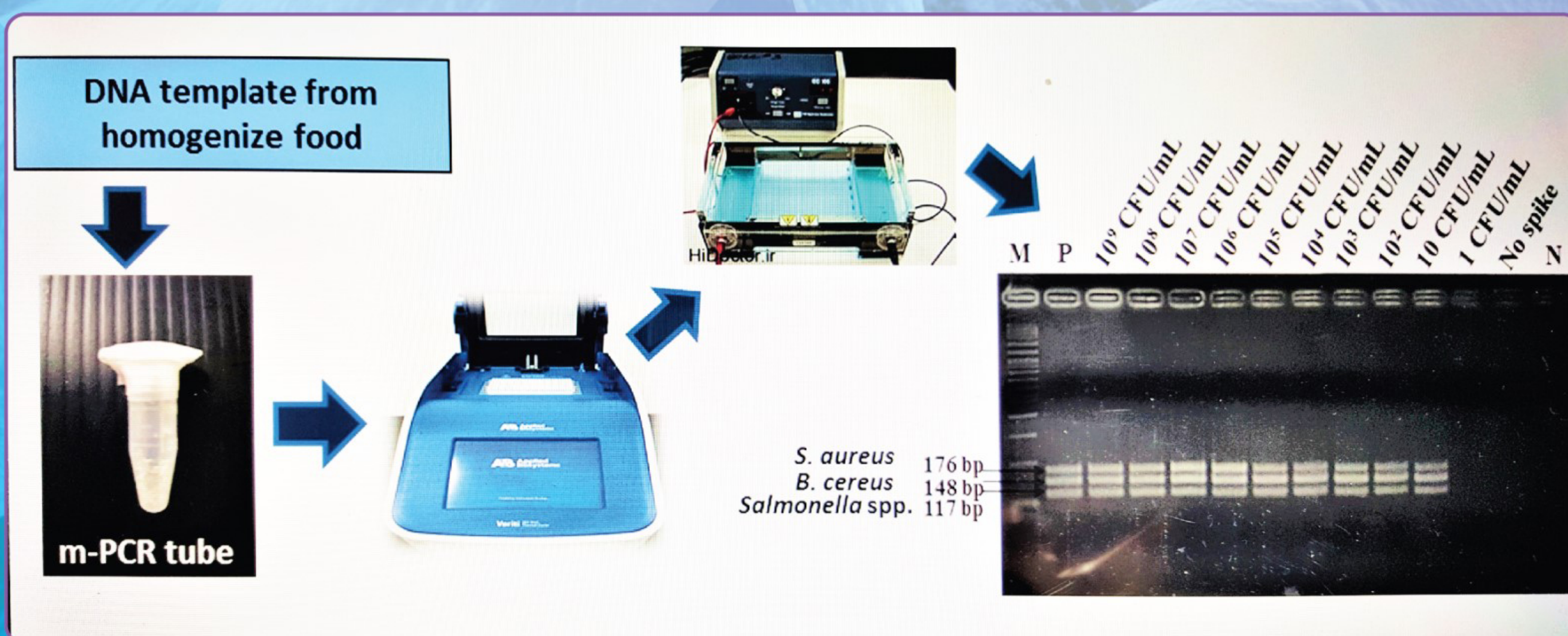
- m-PCR tube developed represented the first assay for ready-to-use simultaneous detection of *Salmonella* spp., *S. aureus* and *B. cereus*
- m-PCR tube is more rapid detection of pathogens compared to simple-polymerase chain reaction and conventional culture method.
- Dry reagent of m-PCR tube do not need to storage in -20°C and a thawing reagent before experimentation.

Application

- m-PCR tube is suitable for food factory that would like to monitor the quality control of food safety in microbiology of their food product.
- m-PCR tube offers a valuable diagnostic tool for the rapid and sensitive detection of three pathogenic bacteria in perishable foods. It is suitable for prevalence study of foodborne bacteria.

IP status

- 1603002525 (minor revise process)



Asst. Prof. Dr. Chiraporn Ananchaipattana

Rajamangala University of Technology Thanyaburi

39 Moo1, Rangsit-Nakhonnahyok Rd., Klong Hok Thanyaburi, Pathumthani, Thailand 12110

e-mail : chiraporn_a@rmutt.ac.th/chiraporna@hotmail.com

Tel. +66 86 415 6574

