Application of PCR-ELISA in molecular diagnosis

Abstract

Polymerase chain reaction-enzyme linked immunosorbent assay (PCR-ELISA) is an immunodetection method that can quantify PCR product directly after immobilization of biotinylated DNA on a microplate. This method, which detects nucleic acid instead of protein, is a much more sensitive method compared to conventional PCR method, with shorter analytical time and lower detection limit. Its high specificity and sensitivity, together with its semiquantitative ability, give it a huge potential to serve as a powerful detection tool in various industries such as medical, veterinary, and agricultural industries. With the recent advances in PCR-ELISA, it is envisaged that the assay is more widely recognized for its fast and sensitive detection limit which could improve overall diagnostic time and quality.

Keyword: PCR-ELISA; Polymerase chain reaction; Method