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Rolling Circle Amplification in Electrochemical Biosensor with Biomedical Applications

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Abstract

Signal amplification is vital in biosensor fabrication, especially for the sensitive analysis of target molecules. Rolling circle amplification (RCA) is an isothermal nucleic acid amplification technique. In a typical RCA process, a short DNA or RNA primer is extended under the catalysis of a polymerase to form a long single stranded DNA or RNA using a circular DNA template. In recent years, various approaches have been proposed to improve the RCA technique, so this nucleic acid amplification technique has become an attractive tool for biosensor fabrication, especially for the development of electrochemical biosensors with biomedical applications. Owing to

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