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Paper Title:	Ultrasound-Triggered DNA-Based Nanotubes: Electrophoretic Evaluation on Synthetic Structures
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Abstract

A nanotube is a nanostructure that mimics the material transport characteristics of ion channels, a membrane protein present in cells. In particular, a DNA nanotube is made of DNA, and by designing their complicated arrangement, it is possible to create a DNA nanotube with a wide variety of functions. We aim to develop a DNA nanotube that can transport materials by ultrasound irradiation (US-DNA nanotube). In this research, confirmation of the synthesis of a DNA nanotube by electrophoresis was attempted. The results suggest the synthesis of DNA nanotubes. Subsequently, we attempted to confirm the binding of Lock to parts of DNA nanotubes by electrophoresis, but the binding to Lock-long was not suggested.
