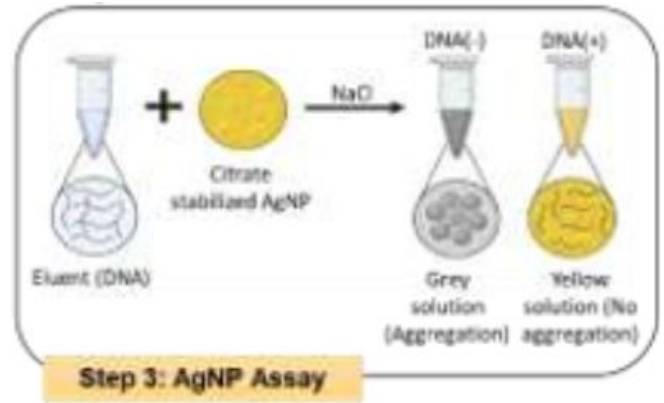


PENDING

(IN202411031701)

Nanoparticle based assay for pathogen detection



NEED

Rapid detection of pathogens is crucial for controlling outbreaks and preventing public health crises. But what if there was a cost-effective, fast, and sensitive way to detect pathogens without complex equipment?

TECHNOLOGY OVERVIEW

This technology provides a simple, label-free assay using citrate-stabilized silver nanoparticles to detect specific pathogens through a color change. It's cost-effective and delivers rapid results, making it ideal for resource-limited environments.

TECHNOLOGY KEY FEATURES

- 1) Label-free, citrate-stabilized silver nanoparticles for pathogen detection.
- 2) Fast, simple visual method.
- 3) No need for expensive equipment.
- 4) Suitable for a wide range of pathogens.
- 5) Affordable and highly sensitive.

[Read more here](#)

MARKET ANALYSIS

The global diagnostics market is growing at a CAGR of 5.1%, expected to reach \$250 billion by 2033. Increasing focus on rapid pathogen detection and diagnostics technology will drive this growth. (Source: Grand View Research, 2023)

Target Industries

- 1) Healthcare Diagnostics for fast pathogen detection.
- 2) Public Health for epidemic monitoring and early diagnosis.
- 3) Biotech R&D for developing pathogen detection assays.

AT A GLANCE

- SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production)

Technology is available for licensing/ co-development.

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