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DEPARTMENT OF
SCIENCE & TECHNOLOGY
सत्यमेव जयते

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TECHNOLOGY
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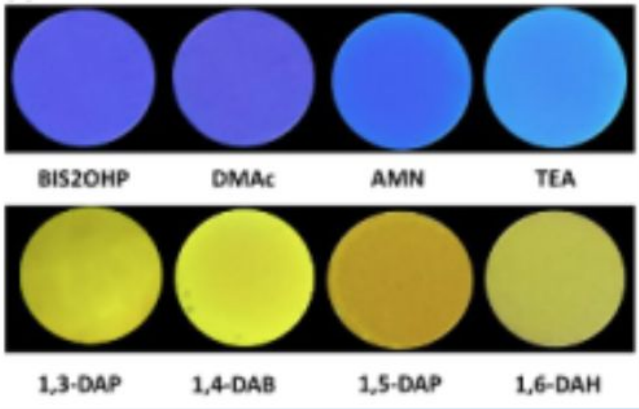
PENDING

(IN202211059922) Fluorophore for detecting biogenic amines and method thereof



NEED

Detecting biogenic amines in samples is critical for various applications, but existing methods are either expensive, slow, or require complex equipment. What if a simple, low-cost fluorophore could provide accurate, instant detection without additional tools?

MARKET ANALYSIS

The global biosensors market is expected to grow at a CAGR of 10.8%, reaching $44.5B by 2033. Increasing demand for low-cost, real-time diagnostic tools in healthcare, agriculture, and food safety is a key driver. (Source: Market Research Future)

TECHNOLOGY OVERVIEW

The invention presents a fluorophore that emits bright blue fluorescence in the presence of biogenic amines, especially polyamines. It offers an inexpensive, easily synthesized, and chemically stable solution for real-time detection. The technology enables simple detection via color changes without complex instruments.

Target Industries

Biotechnology; Healthcare Diagnostics; Food Safety

TECHNOLOGY KEY FEATURES

Inexpensive, easily synthesized; Fluorescence emission variation with biogenic amines; Stable in liquid and solid states; Fluorescence detectable between 300-400 nm excitation; Suitable for polyamine detection

AT A GLANCE

- SDG 3: Good Health and Well-being; SDG 12: Responsible Consumption and Production

Read more here

Technology is available for licensing/ co-development.

Reach out to Prof. Deepak Chitkara, Coordinator, BITS Technology Enabling Centre,
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