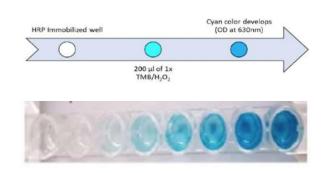






**PENDING** 

(IN202411034469)
Peroxide testing (pet) kit for adulterant detection and method thereof



#### **NEED**

Food safety is critical, especially in dairy products. Adulteration in cow milk is a growing concern, affecting public health and consumer confidence. Current testing methods are often expensive and not easily scalable.

### **MARKET ANALYSIS**

The global dairy testing market is expected to grow at a CAGR of 6.2% from 2023 to 2033, driven by increasing concerns over milk safety and stricter regulations on dairy products. (Source: MarketsandMarkets, 2023)

### **TECHNOLOGY OVERVIEW**

This invention introduces a Peroxide Testing (PeT) Kit for detecting hydrogen peroxide in cow milk. The kit uses immobilized horseradish peroxidase (HRP) on polystyrene strips, offering a cost-effective and reliable method for detecting milk adulteration.

# **Target Industries**

1) Dairy processors ensuring purity and safety of milk products. 2) Food safety testing companies providing reliable adulteration detection tools. 3) Government regulators enforcing milk quality standards.

## **TECHNOLOGY KEY FEATURES**

1) HRP immobilization for sensitive detection. 2) Chromogenic product for easy visual and quantitative analysis. 3) Reusable testing strips for multiple assays. 4) Low-cost detection of hydrogen peroxide.

### AT A GLANCE

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

### Read more here

Technology is available for licensing/ co-development.

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