

BacterLab Division



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## BIOCHEMICAL REAGENTS

### BacterTest™ H<sub>2</sub>O<sub>2</sub>

Performing Catalase detection test to differentiate between  
*Staphylococcus* and *Streptococcus*

Code: 06006



## 1. INTENDED USE

**BacterTest™ H<sub>2</sub>O<sub>2</sub>** is a reagent used to perform a Catalase detection test to differentiate between *Staphylococcus* and *Streptococcus*. If the bacteria have Catalase, the test is positive with the appearance of bubbles when the reagent is dropped on the colony, and negative if nothing happens.

## 2. PRINCIPLES

**BacterTest™ H<sub>2</sub>O<sub>2</sub>** (Hydrogen Peroxide) in microbiological tests mainly based on its strong oxidizing properties. Hydrogen Peroxide (H<sub>2</sub>O<sub>2</sub>) is a highly oxidizing compound, and in microbiological tests, it is used to test for the presence of the enzyme Catalase in bacteria. The enzyme Catalase is capable of decomposing H<sub>2</sub>O<sub>2</sub> into water (H<sub>2</sub>O) and oxygen gas (O<sub>2</sub>), which helps to differentiate bacterial species.

## 3. TYPICAL COMPOSITION

Hydrogen Peroxide	3 mL
distilled water	100 mL

## 4. PREPARATION

- The reagent dropper bottle is ready.

## 5. INSTRUCTIONS FOR USE

- Bacterial culture should be tested for 18 – 24 hours.
- Taking a colony of bacteria and smearing it on a clean glass slide.
- Dropping a few drops of H<sub>2</sub>O<sub>2</sub> on the slide
- Observing the change after 1 – 2 seconds.
- Recording and reading the results

## 6. RESULTS

- Observe the phenomenon of the environment:
  - + Positive: bubbling.
  - + Negative: No bubbling.

## 7. QUALITY CONTROL

**BacterLab** ensures the quality of each product batch by testing with ATCC reference strains.

Reference strains	Growth
<i>S. aureus</i> ATCC 25923	Positive: Bubbles, oxygen bubbles present
<i>L. monocytogenes</i> ATCC 13932	Positive: Bubbles, oxygen bubbles present
<i>E. faecalis</i> ATCC 29212	Negative: No bubbling

## 8. STORAGE AND TRANSPORT CONDITIONS

- Storage: 8 – 25°C.
- Transportation: Ambient temperature.

## 9. PACKAGING

- Packaging: 100 mL/ dropper bottle or as per customer request.

## 10. SHELF LIFE

- Expiration Date: 12 months from the manufacturing date.

## 11. BIBLIOGRAPHY

- Catalase Test- Principle, Uses, Procedure, Result Interpretation with Precautions  
Available at: <https://microbiologyinfo.com/catalase-test-principle-uses-procedure-result-interpretation-with-precautions/>