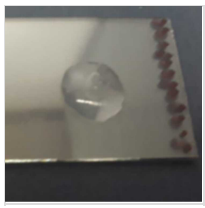

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Mar 17, 2022

Catalase test for bacterial identification V.2

lydiariver [1]

[1]Universidad Autónoma de Nuevo León

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The catalase enzyme is found in most aerobic and facultative anaerobic bacteria that contain cytochrome, being the main exception Streptococcus. Organisms that do not have the cytochrome system also lack the enzyme catalase and therefore cannot break down hydrogen peroxide.

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protocol

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Feb 11, 2022

Mar 17, 2022

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- Hydrogen peroxide (Degasa, Cd. Mexico, Mexico).
- Glass slides.
- Plastic loop
- Group B Streptococcus agalactiae culture on blood agar plate.

1 Transfer 2-4 colonies of the bacterial growth in blood agar plates to a glass slide using a sterile plastic loop, make circles, and let it dry.

NOTE: Culture should be 18 to 24 hours old. Metal loops could cause false positives.

2 Place a drop of hydrogen peroxide (H 2 0 2) on the glass slide with an eyedropper.

NOTE: Store the hydrogen peroxide in a dark bottle and avoid exposure to light. Keep refrigerated when not in use.

3 Observe immediate results.
Positive: The oxygen released will be observed as a formation of bubbles.
Negative: No or very few bubbles produced.

NOTE: Group B Streptococcus agalactiae is catalase-negative.

Citation: lydiariver Catalase test for bacterial identification https://dx.doi.org/10.17504/protocols.io.b4yjqxun

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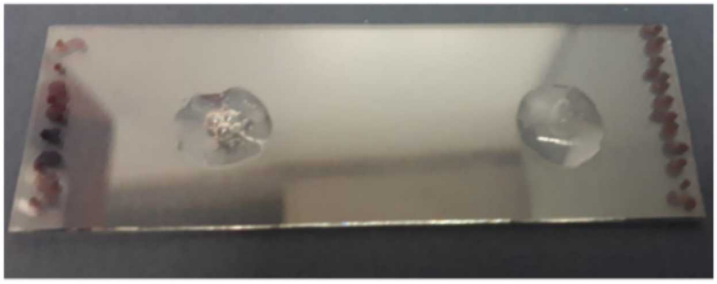

Figure 2. *Staphylococcus aureus* catalase positive (left). *Streptococcus agalactiae* catalase negative (right).

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