

PEPTONE WATER

INTENDED USE

Peptone Water is used for cultivating nonfastidious organisms, for studying carbohydrate fermentation patterns and for performing the indole test.

SUMMARY AND EXPLANATION

The formulation of Peptone Water makes it useful for cultivating nonfastidious organisms.¹ This nonselective medium has been used as a basal medium for biochemical tests such as carbohydrate fermentation patterns and production of indole.^{1,2}

PRINCIPLE

Peptone Water contains peptone as a source of carbon, nitrogen, vitamins and minerals. Sodium chloride maintains the osmotic balance of the medium.

REAGENTS (FORMULA)

Peptone 10.0	g
Sodium Chloride 5.0	g
Deionized Water 1000.0	ml

PROCEDURE

For Determining Carbohydrate Fermentation Patterns

- 1. Inoculate tubes with test organisms.
- 2. Incubate tubes at $35 \pm 2^{\circ}$ C for 18-48 hours.
- 3. Observe for color change.

For Performing the Indole Test

- 1. Inoculate tubes with test organisms.
- 2. Incubate tubes at $35 \pm 2^{\circ}$ C for 24 or 48 hours.

- 3. Using an inoculation loop, spread a loopful of culture over the reaction area of an Indole slide.
- 4. Examine the reaction area for appearance of a pink color within 30 seconds.

EXPECTED RESULTS

For Determining Carbohydrate Fermentation Patterns

Acid is produced when carbohydrates are fermented. This is indicated by a yellow color in the medium. Gas production is indicated by the presence of gas bubbles in the fermentation tube.

For Performing the Indole Test

Observe for the formation of a pink color in the Indole slide reaction area, which indicates a positive test for indole production.

QUALITY CONTROL

All lot numbers have been tested and have been found to be acceptable. Customers can test products using the following quality control organisms. Testing of control organisms should be performed in accordance with established laboratory quality control procedures. If aberrant quality control results are noted, sample results should not be reported.

Organisms	Incubation	Results
Escherichia coli ATCC 25922	35 ± 2 °C for 18-48 hours	Growth, Positive Indole Reaction
Staphylococcus aureus ATCC 25923	35 ± 2 °C for 18-48 hours	Growth, Positive Indole Reaction

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BIBLIOGRAPHY

- 1. MacFaddin. 1985. Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. 1. Williams & Wilkins, Baltimore, Md.
- 2. Balows, Hausler, Herrmann, Isenberg and Shadomy (ed.). 1991. Manual of clinical microbiology, 5th ed. American Society for Microbiology, Washington, D.C.

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