

CLARK-LUBS (MR-VP) BROTH (5 ML)

INTENDED USE:

For performance of Methyl Red and Voges Proskauer tests in differentiation of coli-aerogenes group.

PRINCIPLE AND INTERPRETATION:

This medium contains buffered peptone water, which supports growth of organisms. Dextrose serves as immediate carbon source. On growing the pure culture in the test medium after 18-24 hours the cultures are tested for MR and VP tests. MR test is performed by adding Methyl Red indicator. Methyl red is a pH indicator, which determines the pH when an organism utilizes glucose. On addition of one drop of methyl red indicator at the end of the period of incubation, if the colour changes to distinct red it indicates positive test. Whereas if the reagent turns yellow or yellowish orange, it indicates negative test. VP test detects ability of the organism to produce a neutral end product acetyl methyl carbinol (acetoin) from glucose utilization. This test is done by adding 1-2 drops of Barritt Reagent A and 1-2 drops of Barritt Reagent B. A positive test is indicated by pinkish red colour within 2-5 minutes. No change in colour indicates negative test.

COMPOSITION:

Ingredients	Gr/Liter
Peptone	7.0 gr
Glucose	5.0 gr
Phosphate buffer	5.0 gr

***Formula adjusted, standardized to suit performance parameters

pH: 6,9± 0,2

PRECAUTIONS:

For professional use only. Do not use tubes if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

TEST PROCEDURE:

Incubation at a temperature of 35±2°C and observed after 40-48 hours.

QUALITY CONTROL:

1.Sterility Control:

Incubation 2 d at 30-35°C and 3 d at 20-25°C: NO GROWTH

2.Physical/Chemical Control

pH: 6,9 ± 0,2

Apperance: Clear and yellowish solution.

3.Microbiological Control: Incubation at a temperature of 35±2°C and observed after 40-48 hours.

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
<i>Enterobacter aerogenes</i> ATCC 13048	10-100	Good	MR (-), VP (+)
<i>E.coli</i> ATCC 25922	10-100	Good	MR (+), VP (-)

STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2- 12°C. Use before expiry date on the label..Do not use beyond stated expiry date.

DISPOSAL:

Incubated medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected tube should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

PACKAGING:

Katalog Number: 01004

Content/Packaging:50 Tubes/Box

REFERENCES:

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12. Barritt M. M. (1936) *J. Path. Bact.* 42. 441-454.
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15. Vaughn R., Mitchell N. B. and Levine M. (1939) *J. Amer. Water Works Assoc.* 31. 993.

STERILE A

Aseptic Sterile

LOT

Batch Code

REF

Catalogue Number

CONTROL -

Negative Controls

CONTROL +

Positive Controls



Use by

Temperature
Limitation

Do not reuse

Contains sufficient
for <n> tests

Look at user manual



Manufacturer