

Specification

Medium used for the demonstration of motility, indole production and ornithine- decarboxylase activity of enterobacteria.

Presentation

	Packaging Details	Shelf Life	Storage
20 Tubes Tube 16 x 113 mm with: 9 ± 0.2 ml	1 box with 20 tubes, 16x113 mm glass tubes, ink labelled and metal-Non injectable cap.	12 months	8-25 °C

Composition

Composition (g/l):

Yeast extract.....	3.00
Gelatin peptone.....	10.00
Casein peptone.....	10.00
L-Ornithine HCl.....	5.00
Dextrosa.....	1.00
Bromocresol purple.....	0.02
Agar.....	2.50

Description /Technique

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Medium used for the demonstration of motility, indole production and ornithine- decarboxylase activity of enterobacteria.

Technique

Remove all the dissolved air in the medium by heating up the tubes in boiling water bath and cooling them up to room temperature.

Taking the growth of the primary isolation as the inoculum, inoculate the tubes by a single deep stab. Incubate anaerobically (vaselin) at 35 ± 2°C for a 18-24 hours period. Motility can be observed by the diffuse growth at the upper side of the stab; meanwhile the non-motile bacteria grow along the stab, producing a clear streak.

Ornithine decarboxylation is indicated by the presence of a dark purple colour throughout the tube. Negative reaction produces only a single purple band at the top, and the rest of the tube changes to yellow. Indole production is verified after the addition of a few drops of Kovacs' Reagent (shake gently). The presence of a red ring signifies the positive reaction, and if the colour is yellow, then the reaction is negative.

Quality control

Physical/Chemical control

Color : Violet pH: 6.6 ± 0.2 at 25°C

Microbiological control

Inoculate by stabbing

Add 1 ml approx. of sterile paraffine

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Aerobiosis. Incubation at 37 °C ± 1, reading after 24-48 ± 2h

Microorganism

Escherichia coli ATCC® 25922, WDCM 00013

Klebsiella pneumoniae ATCC® 13883, WDCM 00097

Salmonella typhimurium ATCC® 14028, WDCM 00031

Growth

Good - orn. pos., mot. pos., indol pos.

Good - orn. neg., mot. neg., indol neg.

Good - orn. pos., mot. pos., indol neg.

Sterility Control

Incubation 48 h at 30-35 °C and 48 h at 20-25 °C: NO GROWTH.

Check at 7 days after incubation in same conditions.

Bibliography

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