Drigalski Litmus Lactose Agar

M659

Intended Use:

Recommended for non selective, differential medium for the detection of enteric pathogens.

Composition**

Ingredients	g / L
Peptone	7.000
Sodium chloride	5.000
Lactose	15.000
Litmus	1.200
Agar	13.000
Final pH (at 25°C)	7.4±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 41.2 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Drigalski Litmus Lactose Agar is formulated as per Drigalski and Conrad (1) as a differential medium for the detection of enteric pathogens from water, meat, milk and other food materials.

The medium contains lactose as the source of carbon and fermentable carbohydrate. Peptone supplies essential nitrogenous nutrients to the microorganisms. Litmus is the pH indicator in the medium. Lactose fermenters produce acid and thus change the colour of litmus to red forming red, colonies. Lactose non-fermenters form blue colonies on the medium. Inoculate culture from primary fermentation tubes showing gas either by four-quadrant streaking on the medium or by serial dilution and pour plate technique (2).

Type of specimen

Clinical samples - Urine, stool

Specimen Collection and Handling:

For clinical samples follow appropriate techniques for handling specimens as per established guidelines (2,3).

After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions :

In Vitro diagnostic Use only. For professional use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/ face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling clinical specimens. Safety guidelines may be referred in individual safety data sheets.

Limitations :

1. Further biochemical and serological tests must be carried out for further identification.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the expiry period when stored at recommended temperature.

Quality Control

Appearance

Cream to yellow homogeneous free flowing powder, may have slight dye particles

Gelling

Firm, comparable with 1.3% Agar gel.

Colour and Clarity of prepared medium

Purplish blue coloured, clear to slightly opalescent gel forms in Petri plates

Reaction

Reaction of 4.12% w/v aqueous solution at 25°C. pH : 7.4±0.2

pH

7.20-7.60

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours .

Organism	Inoculum (CFU)	Growth	Recovery	Colour of colony
Enterococcus faecalis ATCC 29212 (00087*)	50-100	fair-good	40-50%	orange-red
Escherichia coli ATCC 25922 (00013*)	50-100	luxuriant	>=70%	orange- red
Salmonella Typhimurium ATCC 14028 (00031*)	50-100	luxuriant	>=70%	blue
Shigella flexneri ATCC 12022 (00126*)	50-100	luxuriant	>=70%	blue
Staphylococcus aureus subsp. aureus ATCC 25923 (00034*)	50-100	good	50-70%	orange- red

Key : *Corresponding WDCM numbers.

Storage and Shelf Life

Store between 10-30°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition. Seal the container tightly after use. Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (2,3).

Reference

1.Drigalski V. and Conrad H., 1902, Z. Hyg. Infektionskr., 39:283.

2.Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.

3.Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.

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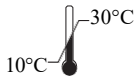
IVD *In vitro* diagnostic medical device



Storage temperature

EC REP CEpartner4U, Esdoornlaan 13,
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www.cepartner4u.eu

CE CE Marking

Do not use if package is damaged

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