

Drigalski Lactose Agar

Selective and differential medium for isolating Enterobacteriaceae and certain non-fermenters from clinical specimens.

DESCRIPTION

Drigalski Lactose Agar is a medium used for the isolation and differentiation of Enterobacteriaceae and certain non-fermenters from clinical specimens.

TYPICAL FORMULA

	(g/l)
Peptone	15.0
Meat Extract	3.0
Yeast Extract	3.0
Sodium Deoxycholate	1.0
Sodium Thiosulfate	1.0
Lactose	15.0
Crystal Violet	0.005
Bromothymol Blue	0.08
Agar	15.0
Final pH 7.3 ± 0.2 at 25°C	

METHOD PRINCIPLE

Peptone and meat extract provide of amino acids, nitrogen, carbon, minerals and vitamins for organisms growth. Yeast extract is a source of vitamins of group B. Sodium thiosulphate, desoxycholate and crystal violet suppress the growth of Gram-positive bacteria. Lactose is the fermentable carbohydrate. Bromothymol blue is the pH indicator. Agar is the solidifying agent.

PREPARATION

<u>Dehydrated medium</u>	Suspend 53.1 g of the powder in 1 liter of distilled or deionized water. Mix well. Heat to boil shaking frequently until completely dissolved. Sterilize in autoclave at 121°C for 15 minutes.
<u>Medium in bottles</u>	Melt the content of the bottle in a water bath at 100°C (loosing the cap partially removed) until completely dissolved. Then screw the cap and check the homogeneity of the dissolved medium, if it is the case turning the bottle upside down. Cool at 45-50°C, mix well avoiding foam formation and aseptically distribute into Petri dishes.

TEST PROCEDURE

Inoculate the medium by spreading the sample over the agar surface. Incubate aerobically at 35 ± 2°C for 18-24 hours.

INTERPRETING RESULTS

Lactose fermenters, such as *E. coli*, *Klebsiella* and *Enterobacter*, produce acid forming yellow colonies surrounded by yellow medium.

Non-fermenters, such as *Proteus*, *Providencia*, *Hafnia*, *Salmonella*, *Serratia*, *Alcaligenes* and *Pseudomonas*, cultivate with blue-gray to blue-green colonies surrounded by blue to blue-green medium.

APPEARANCE

Dehydrated medium: free-flowing, homogeneous, beige.

Prepared medium: slightly opalescent, greenish-blue.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed. Store bottles and prepared plates at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

SHELF LIFE

Dehydrated medium: 4 years.

Medium in bottles: 2 years.

Ready-to-use plates: 6 months.

QUALITY CONTROL

Plates are inoculated with the microbial strains indicated in the QC table.

Inoculum for productivity: 50-100 CFU

Inoculum for selectivity: 10⁴-10⁶ CFU

Incubation conditions: aerobically at 35 ± 2°C for 18-24.

QC Table.

Microorganism		Growth	Specification
<i>Escherichia coli</i>	ATCC® 25922	Good	Yellow colonies, yellow medium
<i>Salmonella Typhimurium</i>	ATCC® 14028	Good	Blue-grey colonies, blue medium
<i>Enterococcus faecalis</i>	ATCC® 29212	Inhibited	---
<i>Staphylococcus aureus</i>	ATCC® 25923	Inhibited	---

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is intended for *In vitro* diagnostic use and must be used only by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.








BIBLIOGRAPHY

1. Association of Official Analytical Chemists (1996) Official methods of analysis of AOAC International.
2. Pollock H.M., and B.J. Dahlgren (1974) Appl. Microbiol. 27(1):197-201.
3. Taylor W.I. (1965) Am. J. Clin. Pathol. 44(4):471-475.

PRESENTATION

		Contents	Ref.
Drigalski Lactose Agar	90 mm ready-to-use plates	20 plates	10018
Drigalski Lactose Agar	Bottles	6 x 100 ml bottles	402220
Drigalski Lactose Agar	Bottles	6 x 500 ml bottles	470280
Drigalski Lactose Agar	Dehydrated medium	500 g of powder	610016
Drigalski Lactose Agar	Dehydrated medium	100 g of powder	620016

TABLE OF SYMBOLS

LOT Batch code	IVD <i>In vitro</i> Diagnostic Medical Device	 Manufacturer	 Use by	 Fragile, handle with care
REF Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult Instruction For Use	 Do not reuse

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