

Technical Data Sheet

Deoxycholate Lactose Agar

Ordering number: 1.02894.0500

Selective agar for the enumeration and isolation of Coliform bacteria from milk, water, ice-cream and other materials.

Mode of Action

The concentrations of deoxycholate and citrate are so low that the coliform bacteria can grow normally whereas the accompanying Gram-positive bacteria are largely inhibited. Degradation of lactose to acid is detected by the pH indicator neutral red which changes its colour to red, and by a zone of precipitation caused by bile acid.

Typical Composition (g/L)

Deoxycholate Lactose Agar	
Peptones	10.0
Lactose	10.0
Sodium chloride	5.0
Sodium citrate	2.0
Sodium deoxycholate	0.5
Neutral red	0.033
Agar-agar**	12.5

**Agar-agar is equivalent to other different terms of agar.

Preparation

Suspend 40 g/litre in demin. water and heat in a boiling water bath or a current of steam. Do not autoclave, pour plates.

pH: 7.1 ± 0.2 at 25 °C.

The plates are clear and red-brown.

The culture medium should be prepared and used the same day.

Experimental Procedure and Evaluation

Inoculate the culture medium by the spread-plate or pour-plate method. Incubation: 24 hours at 35 °C aerobically.

Appearance of Colonies	Microorganisms
Red, surrounded by zone of precipitate	Lactose-positive: Escherichia coli
Pale with a pink centre and surrounded by a zone of precipitate	Weakly lactose-positive: Enterobacter, Klebsiella and others
Colourless	Lactose-negative: Salmonella, Shigella, Proteus, Pseudomonas and others

Quality Control

Control strains	Recovery rate	Colony colour	Precipitate:
Escherichia coli ATCC 25922 (WDCM 00013)	≥ 40 %	red	+
Klebsiella pneumoniae ATCC 13883 (WDCM 00097)	≥ 40 %	pink/red	+ / poor
Enterobacter cloacae ATCC 13047 (WDCM 00083)	≥ 40 %	pink/red	+ / poor
Salmonella typhimurium ATCC 14028 (WDCM 00031)	≥ 40 %	colourless	
Salmonella enteritidis ATCC 13076 (WDCM 00030)	≥ 40 %	colourless	
Shigella flexneri ATCC 12022 (WDCM 00126)	≥ 40 %	colourless	
Proteus mirabilis ATCC 14273	≥ 40 %	colourless	
Enterococcus faecalis ATCC 11700	≥ 0.01 %		
Staphylococcus aureus ATCC 25923 (WDCM 00034)	≥ 0.01 %		

Please refer to the actual batch related Certificate of Analysis.

A recovery rate of 50 % is equivalent to a productivity value of 0.5.



Salmonella enteritidis ATCC 13076



Enterobacter cloacae ATCC 13047

Ordering Information

Product	Cat. No.	Pack size
Deoxycholate Lactose Agar	1.02894.0500	500 g

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