

# China-blue Lactose Agar

Cat. No. 1.02348.0500  
(500 g)

Elective culture medium for differentiating between lactose-positive and lactose-negative microorganisms and for determination of the microbial count in milk (BRANDL and SOBECK-SKAL 1963).

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## Mode of Action

This culture medium is free from inhibitors and contains lactose as a reactant. Degradation of lactose to acid is indicated by a colour change of the pH indicator, china blue, from colourless to blue.

## Typical Composition (g/litre)

Meat extract 3.0; peptone from casein 5.0; sodium chloride 5.0; lactose 10.0; china blue 0.375; agar-agar 12.0.

## Preparation

Suspend 35.5 g/litre, autoclave (15 min at 121 °C).

pH:  $7.2 \pm 0.2$  at 25 °C.

The plates are clear and pale blue.

## Experimental Procedure and Evaluation

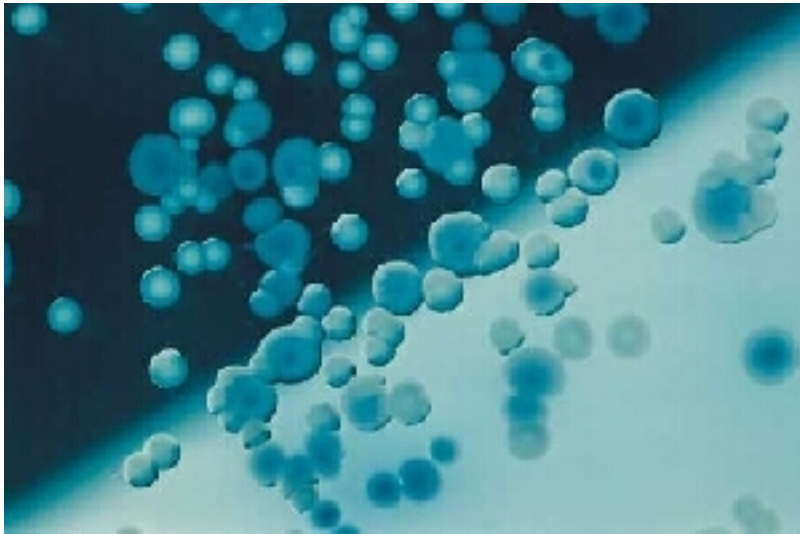
Inoculate the culture medium by the streaking or pour-plate methods. The method employed depends on the purpose for which the medium is used.

Incubation: 24-48 hours under optimal conditions.

<i>Appearance of Colonies</i>	<i>Microorganisms</i>
Blue	Lactose-positive: e.g. E. coli, coliform bacteria, staphylococci, streptococci and others
Colourless	Lactose-negative: e.g. Salmonella, Serratia, Proteus and others

## Quality control

<i>Test strains</i>	<i>Growth</i>	<i>Colour change to blue</i>
<b>Escherichia coli ATCC 25922</b>	good / very good	+
<b>Proteus mirabilis ATCC 29906</b>	good / very good	-
<b>Pseudomonas aeruginosa ATCC 27853</b>	good / very good	-
<b>Enterococcus faecalis ATCC 11700</b>	good / very good	+ (poor)
<b>Streptococcus agalactiae ATCC 13813</b>	good / very good	+
<b>Staphylococcus epidermidis ATCC 12228</b>	good / very good	+
<b>Bacillus cereus ATCC 11778</b>	good / very good	-



E.coli, Serratia marcescens

## Literature

BRANDL, E., u. SOBECK-SKAL, E.; Zur Methodik der Keimzahlbestimmung in Milch mit Chinablau-Lactoseagar. – **Milchwiss. Ber.**, 13 (1963).

