China-blue Lactose Agar

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).

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 ± 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 at 35 °C aerobically.

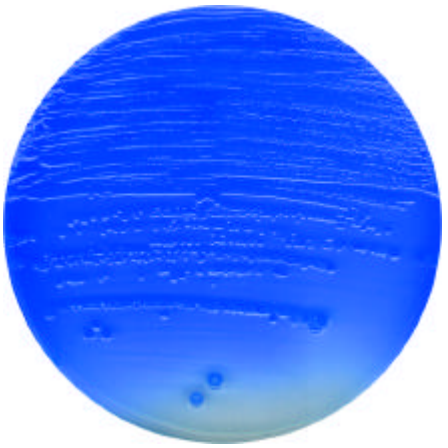
Appearance of Colornies	Microorganisms
Blue	Lactose-positive: e.g. E. coli, coliform bacteria, staphylococci, streptococci and others
Colourless	Lactose-negative: e.g. Salmonella, Serratia, Proteus and others

Literature

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

Ordering Information

Product	Merck Cat. No.	Pack size
China-blue Lactose Agar	1.02348.0500	500 g



Escherichia coli ATCC 25922

Quality control

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