

Technical Data Sheet

China-blue Lactose Agar

Ordering number: 1.02348.0500

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/L)

China-blue Lactose Agar			
Meat extract	3:0		
Peptone from casein	5.0		
Sodium chloride	5.0		
Lactose	10.0		
China blue	0.375		
Agar-agar**	12.0		

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

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

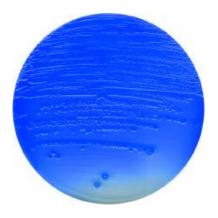
Storage

Store at +15 °C to +25 °C, dry and tightly closed. Do not use clumped or discolored medium. Protect from UV light (including sun light). For *in vitro* use only.

Quality Control

Control strains	Growth	Colour change to blue:
Escherichia coli ATCC 25922 (WDCM 00013)	good to very good	+
Proteus mirabilis ATCC 29906 (WDCM 00023)	good to very good	-
Pseudomonas aeruginosa ATCC 27853 (WDCM 00025)	good to very good	-
Enterococcus faecalis ATCC 11700	good to very good	conform
Streptococcus agalactiae ATCC 13813	good to very good	+
Staphylococcus epidermidis ATCC 12228 (WDCM 00036)	good to very good	+
Bacillus cereus ATCC 11778 (WDCM 00001)	good to very good	-

Please refer to the actual batch related Certificate of Analysis.



Escherichia coli ATCC 25922



Literature

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

Ordering Information

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

Merck KGaA, 64271 Darmstadt, Germany Fax: +49 (0) 61 51 / 72-60 80 mibio@merckgroup.com www.merckmillipore.com/biomonitoring Find contact information for your country at: www.merckmillipore.com/offices
For Technical Service, please visit: www.merckmillipore.com/techservice

