

China Blue Lactose Agar



Medium used for the differentiation between lactose-positive and lactose-negative microorganisms for enumeration of bacteria.

• CONTENTS (Liter)

Peptone	5.0 g
Beef Extract	3.0 g
Lactose	10.0 g
Sodium Chloride	5.0 g
China Blue	0.3 g
Agar	15.0 g
Final pH = 7.0 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 38.3 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Mix well. Dispense in petri dishes.

• INTERPRETATION

China Blue Lactose Agar is a medium used for the differentiation between lactose-positive and lactose-negative microorganisms for enumeration of bacteria. Peptone and beef extract provide nitrogen, carbon, amino acids, and vitamins. Sodium chloride maintains the osmotic balance. Lactose is the carbohydrate source for fermentation. China blue is the pH indicator. Agar is the solidifying agent.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 35 ± 2°C for 22 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: greenish beige.

Prepared medium

Appearance: clear to slightly opalescent.

Color: light blue

Incubation conditions: 35 ± 2°C / 22 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Enterococcus faecalis</i>	29212	50-100	good	blue
<i>Escherichia coli</i>	25922	50-100	good	blue
<i>Proteus vulgaris</i>	13315	50-100	good	colorless
<i>Shigella flexneri</i>	12022	50-100	good	colorless
<i>Staphylococcus aureus</i>	25923	50-100	good	colorless

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Thomas S. B., 1974, the Microflora of Bulk Collected Milk-Part 2, Dairy Ind. Int. 39 (8): 279
2. De Vris T. 1975, Neth. Milk Dairy J., 29:127
3. Cousin M. A., 1982, J. Food Prot., 45:172
4. E. Brandt, E. Sobeck-Skal Milchwiss. Ber. 13, 1 (1963)

• PACKAGE

Cat. No : MB-C2141 China Blue Lactose Agar	500 G
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