

Color T.B.X. Agar



Medium used for the detection and enumeration of *Escherichia coli* in food.

*Equally use with BCIG (5-Bromo-4-Chloro-3-Indolyl- β -D-Glucuronide) Agar (MB-B0790) and MFDS (MB-B0790K).

• CONTENTS (Liter)

Tryptone	20.0 g
Bile Salts No.3	1.5 g
X-Glucuronide	0.075 g
Agar	15.0 g
Final pH = 7.2 \pm 0.2 at 25°C.	

• PROCEDURE

Suspend 36.58 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

Color T.B.X. Agar is a chromogenic and selective medium used for the detection and enumeration of *Escherichia coli* in food. Tryptone provides the essential growth nutrients to microorganisms. Bile salts No.3 inhibits gram-positive organisms. The chromogenic agent X-glucuronide helps to detect glucuronidase activity. The enzyme β -D-glucuronidase which has been shown to be highly specific for *Escherichia coli* splits the bond between the chromophore and the glucuronide. For this, *Escherichia coli* colonies are colored blue-green.

• TECHNIC

Inoculate the plates with spreading the specimen on surface of medium using a sterile loop. Incubate at 44 \pm 1°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

Prepared medium

Appearance: clear to slightly opalescent.

Color: light amber.

Incubation conditions: 44 \pm 1°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Escherichia coli</i>	25922	50-100	good	blue-green colonies
<i>Salmonella typhimurium</i>	14028	50-100	good	colorless colonies
<i>Enterococcus faecalis</i>	29212	$\geq 10^3$	inhibited	-
<i>Bacillus cereus</i>	11778	$\geq 10^3$	inhibited	-

• 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. Anderson J.M. and Baird-Parker A.C. (1975) J. Appl. Bact. 39. 111-117.
2. Feng, P.C. S. and P. A. Hartmann. 1982. Appl. Environ. Microbiol. 43:1320-1329.
3. Gross, R. J. and B. Rowe. 1985. J. Hyg. Camb. 95:513-550.
4. Ottaviani, F., Ottaviani, M., Agosti, M., (1997) Esperienze su un agar selettivo e differenziale per *Listeria monocytogenes*. Industrie alimentari, XXXVI, luglio-agosto, 888.
5. ISO 16649-2 (2001): Microbiology of food and animal feeding stuffs-Horizontal method for the enumeration of *E. coli* – Part 2: colony count technique at 44°C using 5-bromo-4-chloro-3-indolyl-β-D-glucuronic acid.3. Ottaviani, F., Ottaviani, M., Agosti, M., (1997) Esperienze su un agar selettivo e differenziale per *Listeria monocytogenes*. Industrie alimentari, XXXVI, luglio-agosto, 888.

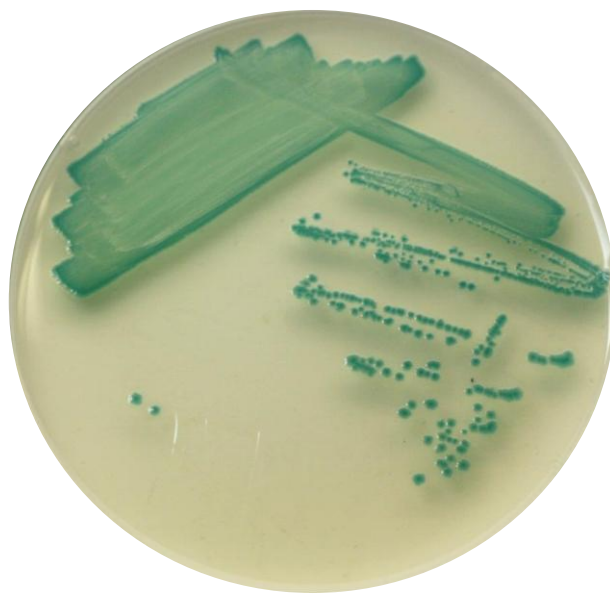
• PACKAGE

Cat. No : MB-C1622 Color T.B.X. Agar	500 G
---	-------

• MICROBIAL CULTURE IMAGES



Salmonella typhimurium ATCC 14028 (≥10⁹ CFU)



Escherichia coli ATCC 25922 (≥10⁹ CFU)

Incubation conditions : 44 ± 1°C 18 - 24h