TBX (TRYPTONE BILE X-GLUCURONIDE) AGAR

INTENDED USE:
A selective, chromogenic medium for the detection and enumeration of Escherichia coli in food.

PRINCIPLE AND INTERPRETATION:
Tryptone Bile Glucoronic Agar contains the enzyme ß -D- glucorinodase which differentiates most E.coli species from other coliforms. E.coli absorbs the chromogenic substrate 5-bromo-4-chloro-3-indolyl-ß-D-glucuronide. The enzyme ß-glucorinodase splits the bond between the chromophere 5-bromo-4-chloro-3-indolyl and the ß-D-glucoronide. E.coli colonies are blue green coloured. Growth of accompanying gram positive flora is largely inhibited by the use of bile salts and the high incubation temperature of 44°C.

COMPOSITION:

Ingredients	Gr/Liter
Tryptone	20 gr
Bile Salts No. 3	1,5 gr
Agar	15 gr
X-glucuronide	0,075 gr

***Formula adjusted, standardized to suit performance parameters

pH: 7,2 ± 0,2

PRECAUTIONS:
For professional use only. Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

TEST PROCEDURE:
Related samples can be processed by direct streaking on the plate, as well as prior appropriate enrichment step.
- If the agar plate has been refrigerated, allow to warm to room temperature before inoculation.
- Streak sample onto plate
- Incubate in aerobic conditions at 44°C for 24 hours

QUALITY CONTROL:

1.Sterility Control:
Incubation 48 hours at 30-35ºC and 72 hours at 20-25ºC: NO GROWTH

2.Phsical/Chemical Control
pH: 7,2 ± 0,2
Apperance: Light beige

3.Microbiological Control: Incubation at 44 ºC during 18-24 h.

Microorganism	Inoculum (CFU)	Results	
		Growth	Reaction
Enterobacter aerogenes ATCC 13048	10-100	Growth	White reaction
Escherichia coli ATCC 25922	10-100	Growth	Blue reaction
Klebsiella pneumoniae ATCC 4352	10-100	Growth	Straw coloured colonies

STORAGE CONDITIONS AND SHELF LIFE:
Store the prepared medium at 2 - 12°C. Use before expiry date on the label. Do not use beyond stated expiry date.

DISPOSAL:
Incubated prepared medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected plate should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

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PACKAGING:

Katalog Number: 02097
Packaging: Single wrap
Content: 10 plates/each package

REFERENCES:

1. Gross R.J. and Rowe B. (1985) J. Hyg. Camb. 95. 513-550.
2. Anderson J.M. and Baird-Parker A.C. (1975) J. Appl. Bact. 39. 111-117.
3. Feng P.C.S. and Hartmann P.A. (1982) Appl. Environ. Microbiol. 43. 1320-1329.
4. Hansen W. and Yourassowsky E. (1984) J. Clin. Microbiol. 20. 1177-1179.
5. Ratnam S., March S.B., Almed R., Bezanson G.S. and Kasatiya S. (1988) J. Clin. Microbiol. 26. 2006-2012.
6. Donovan T.J. et al (1998) Communicable Disease and Public Health 1 : 188-196.
7. PHLS Standard Methods for Microbiological Examination of Food, Dairy and Water Samples. F20: Direct Enumeration of Escherichia coli .
8. ISO 16649-1: 2001. Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of ß-glucuronidase-positive Escherichia coli . Part 1: Colony-count technique at 44°C using membranes and 5-bromo-4-chloro-3-indoyl-beta-D-glucuronide.
9. ISO 16649-2: 2001. Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of ß-glucuronidase-positive Escherichia coli . Part 2: Colony-count technique a 44°C using 5-bromo-4-chloro-3-indoyl-beta-D-glucuronide.