Technical Data Sheet



Tryptone Bile X-glucuronide Agar (TBX)

Product No.	Product Category	Specification
CRM018B	Dehydrated Culture Medium	500g/bottle

Intended Use

For the rapid detection of Escherichia coli in food samples.

Principle and Interpretation

Tryptone provides nitrogen sources, vitamins, and growth factors.5-Bromo-4-chloro-3-indolyl- β -D-glucuronide (BCIG) acts as a chromogenic substrate. *Escherichia coli* β -glucuronidase hydrolyzes BCIG, releasing a chromogen that produces blue-green colonies. Bile Salt No.3 inhibits Gram-positive bacteria, particularly Gram-positive bacilli and Enterococcus faecalis. Agar serves as the solidifying agent.

Formulation

Ingredients	/liter
Tryptone	20.0g
Bile Salt No. 3	1.5g
5-Bromo-4-chloro-3-indolyl-β-D-glucuronide (BCIG)	0.075g
Agar	13.0g
pH 7.2±0.2 at 25°C	

Preparation

Weigh 34.6 g of the dry powder and add to 1 L of distilled or purified water. Stir and heat to boiling until fully dissolved. Autoclave at 121°C for 15 minutes, then cool to 50°C. Pour into sterile Petri dishes.

Quality Control

Cultural characteristics observed after incubation at 35-37°C for 24 hours

Quality control strains	Approx. Inoculum(CFU)	Recovery	Characteristics
Escherichia coli ATCC 25922	10-100	PR≥0.7	Blue-green colonies
Escherichia coli CMCC(B)44102	> 10 ⁴	PR≥0.7	Blue-green colonies
Citrobacter freundii ATCC 43864	> 10 ⁴	Growth observed	White colonies
Enterococcus faecalis ATCC 29212	> 10 ⁴	G ≤1	No growth

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Storage and Shelf Life

2-30°C, Keep container tightly closed, avoid direct sunlight. Use before expiry date on the label.

Precautions

- 1. When weighing the dehydrated medium, please wear masks to avoid causing respiratory system discomfort
- 2. Keep container tightly closed after using to prevent clumping.

Waste Disposal

Microbiological contamination was disposed by autoclaving at 121°C for 30 minutes.

Revision

On June 14, 2024



Escherichia coli: Blue-green colonies **Other bacteria**: White colonies or inhibited/no growth