

## CM 22530 - CHROMOGENIC E.COLI AGAR PLATE (Triple Pack)

### INTENDED USE

For the detection and enumeration of Escherichia coli in foods without further confirmation on membrane filter or by indole reagent.

### PRODUCT SUMMARY AND EXPLANATION

E.coli Agar is a modified version of Tryptone Bile Agar specifically designed for the swift, precise, and dependable detection of Escherichia coli in food samples. This medium can distinguish most E. coli strains from other coliforms by detecting the presence of the highly specific glucuronidase enzyme.

### COMPOSITION

Ingredients	Gms / Ltr
Peptone	20.000
Agar	15.000
Bile Salts	1.500
X-β-D-Glucuronide	0.075

### PRINCIPLE

Chromogenic E. coli Agar is based on Tryptone Bile Agar to detect Escherichia coli in foods, where recovery of E. coli is faster, more reliable and accurate. Most of the E. coli strains can be differentiated from other coliforms by the presence of enzyme glucuronidase, which is highly specific for E. coli. The chromogenic agent X-β-D-Glucuronide used in this medium helps to detect glucuronidase activity of E. coli. E. coli cells absorb X-glucuronide and the intracellular glucuronidase enzyme splits the bond between the chromophore and the glucuronide. The released chromophore gives bluish green colouration to the E. coli colonies. This medium is recommended for isolation of E. coli from water, food and clinical samples.

### INSTRUCTION FOR USE

Either streak, inoculate or surface spread the test inoculum aseptically on the plate.

### QUALITY CONTROL SPECIFICATIONS

Appearance	:	Light amber coloured, clear to slightly opalescent gel.
Quantity of Medium	:	25 ml of medium in 90mm plates.
pH (at 25°C)	:	7.2 ± 0.2
Sterility Check	:	Passes release criteria

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of Colony	Incubation Temperature	Incubation Period
Escherichia coli	8739	50-100	Luxuriant	≥50%	Bluish Green	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	≥50%	Bluish Green	35-37°C	18-24 Hours
Enterobacter aerogenes	13048	50-100	Luxuriant	≥50%	Colourless	35-37°C	18-24 Hours
Staphylococcus aureus	25923	≥10 <sup>3</sup>	Inhibited	-	NA	35-37°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Luxuriant	≥50%	Colourless	35-37°C	18-24 Hours



#### PACKAGING:

Doublelayeredpacking containing 5 No. of plates with one silica gel desiccant bag packed inside it.

#### STORAGE

Onreceipt, store the plates at 2–8 °C. Avoid freezing and overheating. Do not open until ready to use. Prepared plates stored in their original sleeve wrapping until just prior to use may be inoculated up to the expiration date and incubated for recommended incubation times. Allow the medium to warm to room temperature before inoculation. Product Deterioration: Do not use plates if they show evidence of microbial contamination, discoloration, drying, cracking or other signs of deterioration.

#### DISPOSAL

Afteruse,prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

#### REFERENCES

1. Collee J. G., Fraser A. G., Marmion B. P., Simmons A., (Eds.), Mackie and McCartney,
2. Practical Medical Microbiology, 1996, 14th Edition, Churchill Livingstone.
3. Pezzlo M., 1998, Clin. Microbiol. Rev., 1:268-280.
4. Wilkie M. E., Almond M. K., Marsh F. P., 1992, British Medical Journal 305:1137-1141.
5. Friedman M. P. et al, 1991, J. Clin. Microbiol., 29:2385-2389.
6. Murray P., Traynor P. Hopson D., 1992, J. Clin. Microbiol. 30:1600-1601.
7. Soriano F., Ponte C., 1992, J. Clin. Microbiol. 30:3033-3034.
8. Merlino et al, 1995, Abstr. Austr.Microbiol. 16(4):17-3.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

\*ForLabUse Only

