70722 E. coli *ChromoSelect* Agar B

E. coli *ChromoSelect* Agar B is recommended for the detection and enumeration of *Escherichia coli* in foods without further confirmation on membrane filter or by indole reagent.

Composition:

Ingredients	Grams/Litre
Casein enzymic hydrolysate	20.0
Bile salts mixture	1.5
X-Glucuronide	0.075
Agar	15.0
Final pH (at 25 °C) 7.2 ± 0.2	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions:
Suspend 36,6g per litre distilled water. Sterilize by autoclaving at 121°C for 15 minutes. Cool to 50°C and pour into sterile petri plates.

Principle and Interpretation:
E. coli *ChromoSelect* Agar is based on Tryptone Bile Agar to detect *Escherichia coli* in foods (1), where recovery of Escherichia coli is faster, more reliable and accurate. Most of the *Escherichia coli* strains can be differentiated from other coliforms by the presence of enzyme glucuronidase which is higly specific for *Escherichia coli* (2). The chromogenic agent X-glucuronide used in this medium helps to detect glucuronidase activity. *Escherichia coli* cells absorb x-glucuronide and the intracellular glucuronidase splits the bond between the chromophore and the glucuronide. The released chromophore gives colouration to the colonies. The casein enzymic hydrolysate provides the essential growth nutrients to the organisms. Bile salts mixture inhibits gram-positive organisms. The surface of the plated medium is dried before use. Dilute food samples 1: 5 or 1:10 with 0.1% (w/v) sterile Peptone Water (Cat. No. 70179) and homogenize in a blender or a stomacher. Pipette 0.5 ml or 1.0 ml of the homogenized food sample on to the plate and spread with sterile glass spreader and incubate the plates at 30°C for 4 hours and then at 44°C for 18 hours.
The medium should be used only for in-vitro diagnostic purpose. Wear mask while handling the dehydrated product and avoid contact with eyes.

Cultural characteristics after 18-24 hours at 44°C.

Organisms (ATCC)	Growth	Colour of colony
Escherichia coli (25922)	luxuriant	blue
Klebsiella pneumoniae (13883)	luxuriant	colourless, mucoid
Salmonella enteritidis (13076)	luxuriant	colourless
Staphylococcus aureus (25923)	inhibited	

References:
1. Anderson J.M. and Baird-Parker A.C., 1975, J. Appl. Bact., 39:1 1 1
2. Hansen W. und Yourassawsky E., 1984, J. Clin. Microbiol., 20:1177

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.