39894 EC O157 *ChromoSelect* Agar

EC O157 *ChromoSelect* Agar is a chromogenic medium for isolation and differentiation of *E. coli* O157 from food and environmental samples.

Composition:

Ingredients	Grams/Litre
Casein enzymic hydrolysate	8.0
Sorbitol	7.0
Bile salts mixture	1.5
Sodium Lauryl Sulfate	0.1
Chromogenic mixture	0.25
Agar	12.0
Final pH 6.8 +/- 0.2 at 25°C	

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

Appearance: Light yellow coloured, homogeneous, free flowing powder.
Gelling: Firm
Colour and Clarity: Light amber coloured, clear to slightly opalescent gel forms in petri plates.

Directions:
Suspend 28.85 g in 1 liter distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 50°C and pour into sterile petri plates. This medium can be made more selective by aseptically adding 0.25 ml of 1% potassium tellurite solution (Cat. No. 17774) to 1 liter molten and cooled medium (45°C).

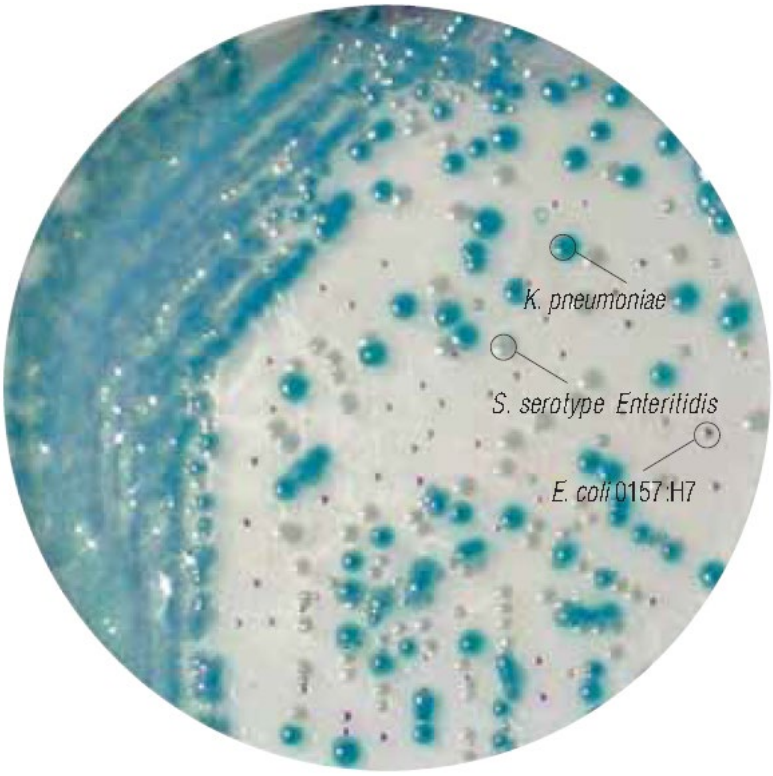
Principle and Interpretation:
EC O157 *ChromoSelect* Agar is based on the formulation described by Rappaport and Henigh (1). The medium contains sorbitol and a proprietary chromogenic mixture instead of lactose and indicator dyes respectively.
The chromogenic substrate is specifically and selectively cleaved by *Escherichia coli* 0157:H7 resulting in a dark purple to magenta coloured moiety. *Escherichia coli* gives light pink – mauve coloured colonies.
Casein enzymic hydrolysate provides carbonaceous, nitrogenous and growth nutrients. Sodium chloride maintains osmotic equilibrium. Bile salts mixture and sodium lauryl sulfate inhibits gram positive organisms. Sorbitol is a fermentable sugar which can be used from the typical *E. coli* but not from *Escherichia coli* 0157:H7.

Cultural characteristics after 48 hours at 35°C.

Organisms (ATCC)	Growth	Colour of Colony
Bacillus subtilis (6633)	-	-
Escherichia coli 0157:H7 (NCTC 12900)	+++	dark purple- magenta
Escherichia coli (25922)	+++	light pink- mauve
Klebsiella pneumoniae (13883)	+++	blue, mucoid
Pseudomonas aeruginosa (27853)	+++	colourless
Staphylococcus aureus (25923)	-	-
Salmonella serotype Enteritidis (13076)	+++	light greenish blue
Saccharomyces cerevisiae (9763)		-

References:

1. F. Rappaport, E. Henigh, J. Clin. Path., 5:361.
2. P.M. Zadik, P.A. Chapman, C.A. Siddons, J. Med. Microbiol., 39, 155-158 (1993)



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.