

72557 EC O157:H7 *ChromoSelect* Selective Agar, Base

EC O157:H7 *ChromoSelect* Selective Agar is recommended for selective isolation and easy detection of *Escherichia coli* O157:H7 from food 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	15.0
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 at 2-25°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 31.85 g in 990 ml distilled water. Boil gently to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 50°C. Add 1 vial of ECO157:H7 *ChromoSelect* Selective Supplement (Cat. No. 44931) aseptically. Mix well and pour into sterile petri plates.

Principle and Interpretation:

EC O157:H7 *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* O157:H7 resulting in a dark purple to magenta coloured moiety. *Escherichia coli* gives light pink to mauve coloured colonies.

Casein enzymic hydrolysate provides carbonaceous, nitrogenous and growth nutrients. Sodium chloride maintains osmotic equilibrium. Addition of EC O157:H7 *ChromoSelect* Selective Supplement makes the medium selective (2). Potassium tellurite selects the serogroups and inhibits *Aeromonas* species and *Providencia* species. Novobiocin inhibits gram-positive bacteria.

Cultural characteristics after 18-24 hours at 35-37°C.

Organisms (ATCC)	Growth	Colour of colony
<i>E. coli</i> O157:H7 (35150)	+++	dark purple-magenta
<i>E. coli</i> (25922)	-/+	light pink to mauve
<i>K. pneumoniae</i> (13883)	-	-
<i>Ps. aeruginosa</i> (27853)	+	colourless

References:

1. F. Rappaport, E. Henigh, J. Clin. Path., 5, 361 (1952)
2. P.M. Zadik, P.A. Cahpman, 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.

