Reading the Results

Evaluation

Colonies of *E. coli* O157 appear mauve colored. Other bacteria appear colorless, blue, or are inhibited.

Organism	Colony Appearance
E. coli O157:H7	Mauve
Coliforms	Steel blue
Other bacteria	Colorless or grey

Limitations

Not for human diagnostic use. A latex confirmation test for O157 is suggested for suspect colonies. Definite identification as *E. coli* O157 requires, in addition to characterization of O157 serotype, a final identification as E. coli.

InTray COLOREX O157 is an agar medium that is susceptible to condensation collection within the inner seal, especially when stored at low temperatures and/or having been exposed to extreme temperature fluctuations. If moisture is visible on the surface of the InTrays, dry them (with the seal removed and InTray label in a position allowing for air flow) under a BSL-2 cabinet just prior to inoculation. There should be no visible droplets of moisture on the surface of the agar when they are inoculated. The surface of the dried medium should be smooth and should not show signs of desiccation such as webbed ribbing pattern on the agar surface.

References

- Durso, et al 2010. Medical Laboratory Observer. March 1, 2010; p.42
- 2. Bettelheim, et al. 1998; J Appl Microbiol; 85



Symbol glossary: biomeddiagnostics.com/l/symbol-glossary

Document Revision History Rev. D, December 2019

New format; added new catalog numbers, limitation about condensation, reference to online symbol glossary, document revision history; indicated 18-25°C instead of room temperature; reorganized and retitled some sections



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BIOMED

InTray[®] COLOREX[™] 0157



11-213-002

For research use only. Not for use in diagnostic procedures.

-8° C



of Analysis

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Introduction

Intended Use

COLOREX[™] O157 is a selective and differential medium for isolation of the enterohemorrhagic *Escherichia coli* O157 from food and environmental samples. The test can be performed on direct or enriched samples of food, meat trimmings or animal fecal material. Not for human diagnostic use.

Description and Principle

E. coli O157 is a clinically significant pathogen responsible for outbreaks of serious food-borne disease. Cattle and sheep are the primary reservoir for this pathogen. Outbreaks of food-borne illness have been directly associated with the consumption of bovine food products contaminated with *E. coli* O157.¹

Traditional selective agars for this pathogen have been based on the ability of the bacteria to ferment either sorbitol or rhamnose, and the absence of beta-glucuronidase activity. Classical media entail complex and costly detection procedures. COLOREX O157 was developed to differentiate *E. coli* O157 from non-*E. coli* O157 on the basis of colony color. Chromogenic substrates in the media are metabolized by *E. coli* O157 to produce dark pink to mauve colored colonies on the plate. Non-*E. coli* O157 coliforms appear as blue colonies. Other bacteria appear colorless, grey or inhibited. Sensitivity for *E. coli* O157 is 98%.²

Reagents and Appearance

COLOREX O157 appears clear to opalescent and contains agar, peptone nutrients, salts, tellurite and chromogenic additives. The media has a final pH of 7.0 \pm 0.2.

Precautions, Safety and Disposal

Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing and gloves.

Once the tray has been inoculated and resealed, re-open only in a biological safety cabinet. Because of the potential for containing infectious materials, the tray must be destroyed by autoclaving at 121°C for 20 minutes.

Storage

Upon receipt, store InTray COLOREX O157 under refrigeration (2-8°C). Medium can be kept for one day at ambient temperature. Protect media from exposure to light, excessive heat, moisture and freezing. Do not open until ready to use. Do not use if the medium shows signs of deterioration, shrinking, cracking, discoloration or contamination.

Shelf Life

InTray COLOREX 0157 has a shelf life of 12 months from the date of manufacture.

Procedure

Materials Provided

Prepare InTray

3 Inoculate Sample

InTray COLOREX 0157

Materials Required but Not Provided

- Sterile inoculating tool (e.g., cotton swab/forceps/scalpel blade)
- Laboratory incubator capable of incubation at 35 to 37°C



Allow the InTray to warm to 18-25°C.

Lift the lower right corner of the flexible InTray label until the protective seal is completely visible.

Streak laboratory sample onto the agar surface for isolation.





Remove the paper-foil seal by pulling the tab.

Discard the seal.

Do not remove or alter the white filter strip over the vent hole.

4 Secure InTray



Reseal the InTray label to the plastic tray body. Press all around the perimeter of the InTray to ensure a complete seal.

Immediately label the InTray with sample information and date.

Do not cover the viewing window.

Organism	ATCC	Expected Result
E. coli 0157:H7	35150	Mauve
E. coli	25922	Metallic blue
K. pneumonia	13883	Metallic blue
E. faecalis	29212	Inhibited

Incubation

Incubate at 35 to 37°C for 24 hours under ambient atmosphere. .

Quality Control

This product has been tested and meets the CLSI (formerly NCCLS) Approved Standard for commercially prepared media (M22-A3). At the time of manufacture, quality control testing is performed on each lot of the InTray COLOREX 0157. The ability of the media to support growth and demonstrate expected biochemical reactions and morphology is verified by lot.

All COLOREX 0157 agar products are performance verified with the following ATCC[®] microbe strains. Product performance is also verified periodically throughout the marked shelf life of each lot.