



## InTray™ Sorbitol MacConkey Agar

20-2507 (5 pack); 20-2501 (20 pack)

### INTENDED USE

Sorbitol MacConkey Agar (SMA) is a selective and differential media for the detection of sorbitol-non-fermenting *Escherichia coli* serotype 0157:H7 associated with hemorrhagic colitis. This medium is also referred to as "MacConkey Sorbitol Agar."

### DESCRIPTION AND PRINCIPLE OF USE

*E. coli* serotype 0157:H7 is a human pathogen associated with hemorrhagic colitis that results from the action of a shiga-like toxin (March and Ratnam. 1986. *J. Clin. Microbiol.* 23). On standard MacConkey Agar containing lactose, this strain is indistinguishable from other lactose-fermenting *E. coli*. Field results show that the growth of *E. coli* 0157:H7 on SMA is heavy and occurs in almost pure culture-- as colorless sorbitol-non-fermenting colonies. Most organisms of the fecal flora ferment sorbitol and appear pink on this medium. SMA, therefore, permits ready recognition of *E. coli* 0157:H7 in stool cultures. (CDC. 1991. *Morbidity and Mortality Weekly Rep.* 40; Bopp, et al. 1999. In Murray, et al. [eds.] *Manual of Clinical Microbiology*, 7th ed. ASM, Washington, D.C.)

### STORAGE

Upon receipt, store InTray™ SMA under refrigeration (2-8°C). Medium can be kept for one day at ambient temperature. Avoid freezing or prolonged storage at temperatures above 40°C. Do not open until ready to use. Do not use if the medium shows signs of deterioration or contamination.

### INOCULATION PROCEDURE

Allow the InTray™ to warm to room temperature. Lift the lower right corner of the flexible InTray™ label until the protective seal is completely visible. Remove the paper-foil seal by pulling the tab (Fig. 1). **Discard** the seal. **DO NOT REMOVE OR ALTER THE WHITE FILTER STRIP OVER THE VENT HOLE!**

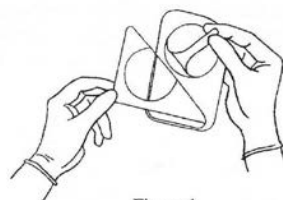


Figure 1

Streak sample onto the agar surface (Fig. 2).

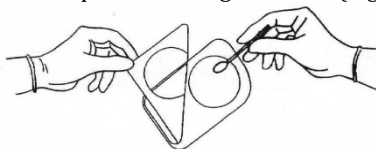


Figure 2

Reseal the InTray™ label to the plastic tray body. **Press all around the perimeter of the InTray™ to ensure a complete seal** (Fig. 3). Immediately label the InTray™ with patient or sample information and date. **Do NOT COVER THE VIEWING WINDOW.**



Figure 3

### CULTURE AND RESULTS

Incubate at 35±2°C for 18-24 hours under ambient atmosphere. Use standard procedures to obtain isolated colonies from specimens. After incubation, the plates should show isolated colonies in streaked areas and confluent growth in areas of heavy inoculation. Sorbitol fermenters produce pink to red colonies, some surrounded by zones of precipitated bile, while sorbitol-non-fermenters produce colorless colonies.

### INTERPRETATION

Organism	Colony Appearance
<i>E. coli</i> 0157:H7	Colorless
<i>E. coli</i>	Pink to red w/ bile ppt
<i>E. faecalis</i>	Marked to complete inhibition

### LIMITATIONS/PRECAUTIONS

**For research use only.** Gram staining, biochemical tests and serological procedures should be performed to confirm findings. It has been reported that some *Enterobacteriaceae* sp. and *Pseudomonas*

*aeruginosa* are inhibited on SMA when incubated in a CO<sub>2</sub>-enriched atmosphere. Prolonged incubation of the culture may result in colonies of *E. coli* 0157:H7 losing their characteristic colorless appearance. There are additional species of facultative anaerobic gram-negative rods that do not ferment sorbitol. The color of sorbitol-positive colonies can fade, making them hard to distinguish from sorbitol-negative colonies.

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

### REAGENTS

SMA contains Agar, peptone nutrients, selective compounds and chromogenic additives.

### QUALITY CONTROL

All Biomed products lots are performance verified with ATCC® microbe strains. Product performance is also verified periodically throughout the marked shelf life of each lot.

Organism	ATCC®	Colony Appearance
<i>E. coli</i> 0157:H7	35150	Colorless
<i>E. coli</i>	25922	Pink to red w/ bile ppt.
<i>E. faecalis</i>	29212	Marked to complete inhibition

SYMBOL KEY			
Symbol	Used For	Symbol	Used For
	Batch code		Temperature limitation
	Date of manufacture		Catalog number
	Use by YYYY-MM-DD or YYYY-MM		Caution, consult accompanying documents
	Manufacturer		Authorized representative in the European Community
	In vitro diagnostic medical device		in European community

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