

Selenite Cystine Broth



Medium used for isolation and cultivation of *Salmonella* spp.

• CONTENTS (Liter)

Tryptone	5.0 g
Lactose	4.0 g
Sodium Phosphate	10.0 g
Sodium Selenite	4.0 g
L-Cystine	0.01 g
Final pH = 7.0 ± 0.2 at 25°C	

• PROCEDURE

Suspend 23.01 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. DO NOT AUTOCLAVE. Over heating will destroy the selectivity. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

• INTERPRETATION

Selenite Cystine Broth is a medium used for the isolation and cultivation of *Salmonella* spp. Tryptone provides nitrogen, carbon, amino acids and minerals. Lactose is the fermentable carbohydrate. Sodium phosphate is the buffering agent. Sodium selenite is the selective agent. L-cystine promotes the growth of organisms.

• TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 35 ± 2°C for 18 - 24 hours. Slightly loosen the caps. Subculture onto MacConkey Agar and incubate at 35 ± 2°C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: off-white

Prepared medium

Appearance: clear

Color: very light amber to reddish amber

Incubation conditions: 35 ± 2°C / 18 - 24 hours / loosen the caps

then subculture onto MacConkey Agar / 35 ± 2°C / 18 - 24 hours

Microorganism	ATCC	Inoculum CFU	Growth	Characteristics
<i>Salmonella typhimurium</i>	14028	50-100	good	colorless colonies
<i>Escherichia coli</i>	25922	≥10 ³	partially inhibited	pink colonies with bile precipitates

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label. Store prepared medium at 2 - 8°C.

* If stored for a long time dehydrated medium, the color of dehydrated medium and prepared medium may be darken. But performance of medium is not affected. The color change can be delayed during storage by sealing using a zipper bag, etc.

• REFERENCES

1. Methods of Analysis AOAC, 11th ed., 1980.
2. US Pharmacopeia XX, 1980.
3. Leifson, Am. J. Hyg., 24: 423, 1936.
4. ISO 6785: 2001, IDF 93: 2001. Milk and milk products –Detection of Salmonella spp.

• PACKAGE

Cat. No : MB-S1150 Selenite Cystine Broth	500 G
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