

Microbiology
Merckotube® Selenite cystine enrichment broth 1.18429.0025

- Glass tube
- 10 ml filling volume
- Screw cap
- 25 tubes per pack

Selenite cystine broth

For the enrichment of salmonellae in foodstuffs and other materials.

This culture medium complies with the recommendations of the American Public Health Association, the United States Pharmacopeia XXIX.

Mode of Action

Selenite inhibits the growth of coliform bacteria and enterococci in the first 6-12 hours of incubation; its inhibitory effect then gradually declines. Salmonella, Proteus and Pseudomonas are, however, only slightly inhibited.

Typical composition (g/l)

Peptone from casein 5.0; L(-)cystine 0.01; lactose 4.0; phosphate buffer 10.0; sodium hydrogen selenite 4.0.

pH: 7.0 ± 0.2 at 25 °C.

The appearance of the medium is clear and yellowish.

Experimental Procedure and Evaluation

Add solid material to the normal-strength broth. Mix liquid samples with double-strength broth in the ratio 1:1.

Incubation: up to 24 hours at 35-37 °C - according to BÄNFFER (1971) and other authors, 43 °C is better.

After 6-12 hours and if necessary after 18-24 hours inoculate material from the resulting culture onto selective culture media.

Shelf life in month

7 month

Storage

+2°C to +8°C

Ordering information

Product	Merck Cat.No.	Pack size
Merckotube® Selenite cystine enrichment broth	1.18429.0025	25 tubes (25 x 10 ml)

Quality control

Inoculum	Spec. Values
Salmonella typhimurium ATCC 14028	≤100
Escherichia coli ATCC 25922	≥10000
Enrichment from a mixed inoculum after 24h	
Salmonella typhimurium ATCC 14028	≥90 %
Escherichia coli ATCC 25922	≤10 %
Growth	
Salmonella typhimurium ATCC 14028	+
Escherichia coli ATCC 25922	none
Inoculum (Salmonella abony NCTC 6017)	Inoculum ≤100
Test according to Ph.Eur	
Salmonella typhimurium ATCC 14028	+
Salmonella abony NCTC 6017	+
Sterility test	
Growth	
2 weeks at 20 to 25°C	no growth
2 weeks at 30 to 35°C	no growth

Enrichment of Salmonella typhimurium from a mixed inoculum, detection with BROLACIN agar.

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