

Technical Data Sheet

☒ Selenite Enrichment Broth acc. to Leifson

Ordering number: 1.07717.0500

Medium proposed by Leifson (1936) for the selective enrichment of *Salmonella* from faeces, urine, water, foodstuffs etc.

The medium complies with the recommendations of the APHA (1992).

IVD in vitro diagnosticum - For professional use only

Mode of Action

Selenite inhibits the growth of enteric coliform bacteria and enterococci, mainly during the first 6-12 hours of incubation. *Salmonella*, *Proteus* and *Pseudomonas* are not suppressed.

Typical Composition

Peptone from Meat	5 g/l
Lactose	4 g/l
NaHSeO	4 g/l
K ₂ HPO ₄	3.5 g/l
KH ₂ PO ₄	6.5 g/l

Preparation

Suspend 23 g/l at room temperature. If the medium does not dissolve readily, heat briefly (max. 60 °C). If the medium is to be stored for a longer period of time filter-sterilize, dispense into suitable containers.

Do not autoclave.

The appearance of the prepared broth is clear and yellowish.

The pH value at 25 °C is in the range of 6.8-7.2.

Experimental Procedure and Evaluation

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

Incubation: up to 24 h at 37 °C – according to Bänfer (1971) and other authors, 43 °C is better.

After 6-12 h and, if necessary, after 18-24 h inoculate material from the resulting culture onto selective Selenite Enrichment Broth acc. to Leifson culture media.

Storage

After a longer storage period of the dehydrated medium, the color of the prepared broth might change to reddish-red. The microbiological performance however is not affected.

Usable up to the expiry date when stored dry and tightly closed below +15 °C. Protect from light.

After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed below +15 °C.

Storage of the dehydrated culture medium below 15 °C!

Specimen

e.g. Stool, urine.

Clinical specimen collection, handling and processing. See general instructions of use.

Quality Control

Control Strains	ATCC #	Inoculum	Incubation	Expected Results
<i>Escherichia coli</i>	25922	About 99 %	24 h at 35 °C	Enrichment from a mixed inoculum ≤ 10 %
<i>Salmonella typhimurium</i>	14028	About 1 %	24 h at 35 °C	Enrichment from a mixed inoculum ≥ 90 %

Please refer to the actual batch related Certificate of Analysis.

Literature

American Public Health Association (1992): Compendium of methods for the microbiological examination of foods. 3rd edition.

Bänfer, J.R. (1971): Comparison of the isolation of *Salmonellae* from human faeces by enrichment at 37 °C and 43 °C. Zbl. Bakt. I. Orig. **217**: 35-40.

Georgala, D. L. and Boothroyd, M. (1965): A system for detecting *salmonellae* in meat and meat products. Journal of Applied Bacteriology. **28**: 206-212.

Leifson, E. (1936): New selenite enrichment media for the isolation of typhoid and paratyphoid (*Salmonella*) bacilli. Am. J. Hyg. **24**: 423-432.

Ordering Information

Product	Cat. No.	Pack size
Selenite Enrichment Broth acc. to Leifson	1.07717.0500	500 g

Merck KGaA, 64271 Darmstadt, Germany
Fax: +49 (0) 61 51 / 72-60 80
mibio@merckgroup.com
www.merckmillipore.com/biomonitoring

Find contact information for your country at:
www.merckmillipore.com/offices
For Technical Service, please visit:
www.merckmillipore.com/techservice



We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

Merck Millipore and the M logo are registered trademarks of Merck KGaA, Darmstadt, Germany. ATCC is a registered trademark of ATCC, Manassas, VA, USA. Lit. No. TN1472EN00