

Specification

Sterile selective supplement used for *Salmonella* enrichment.

Presentation

10 Freeze dried vials

Vial

with: 3 ± 0.1 g

Packaging Details

$22 \pm 0.25 \times 55 \pm 0.5$ mm glass vials, tag labelled, White plastic cap - 10 vials per box.

Shelf Life

49 months

Storage

2-25 °C

Composition

Composition (g/vial)

Novobiocin..... 0.020

NOTE: Each vial is sufficient to supplement 1L of Rappaport-Vassiliadis medium

Reconstitute the original freeze-dried vial

by adding :

Sterile Distilled Water..... 6 ml

Description /Technique

Description:

The Novobiocin is used in different culture media like Tetrathionate Broth (Eur. Pharm.) or Rappaport-Vassiliadis, in order to isolate *Salmonellas spp.* enhancing the inhibition of Gram-positive microorganism.

Collect, dilute and prepare samples and volumes as required according to specifications, directives, official standard regulations and/or expected results.

Reconstitute the vial with 6 ml of sterile diluent, pre-warmed to aprox. 37°C and add to 500 ml of Tetrathionate broth base cooled to room temperature.

Note: for Rappaport-Vassiliadis Medium add 1 vial / L medium.

For Salmonella enrichment - Use Tetrathionate broth

Immediately before inoculation, supplement tubes or flask to get the following concentrations:

Iodine solution.....4 g / l and Potassium iodide solution.....5 g / l

Incubate the tubes tightly closed aerobically at $42 \pm 2^\circ\text{C}$ for 24h.

(Incubation times, temperature and sample volumes may vary depending on the sample, on the specifications,...)

Read the turbidity (growth indicator) and inoculate any confirmatory, secondary medium by streaking methodology or by spiral method, like XLD, BPLS,... to confirm results after proper incubation, enumerate all the colonies that have appeared onto the surface of the secondary agar.

Presumptive isolation / recovery of *Salmonella* must be confirmed by further microbiological and biochemical tests.

Each laboratory must evaluate the results according to their specifications.

Quality control

Physical/Chemical control

Color : White-Gray

pH: at 25°C

Microbiological control

Reconstitute 1 vial as indicated in COMPOSITION; shake and dissolve completely

Add 1 vial to 500 ml of medium base. DO NOT HEAT once supplemented.

Distribute the complete medium, cooled to 50 °C, into 90 mm plates

Incubate according instructions for complete medium indicated in COMPOSITION.

Microorganism

Salmonella enterica ATCC® 13076, WDCM 00030

Salmonella typhimurium ATCC® 14028, WDCM 00031

Enterococcus faecalis ATCC® 19433

Growth

Good

Good

Inhibited

Sterility Control

Study 5 vials - Reconstitute and dissolve each one in 100 ml of TSA + neutralizers - Pour into 90 mm plates.

Incubation 24h at 30-35 °C and 72 h at 20-25 °C: NO GROWTH.

Bibliography

- EUROPEAN PHARMACOPOEIA (2005) 5th ed. § 2.6.13. Microbiological Examination of Non-Sterile Products (Test for Specified Microorganisms). EDQM. Council of Europe. Strasbourg.
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- HOLBROOCK, R., J.M. ANDERSON, A.C. BAIRD-PARKER, L.M. DODDS, D. SAWHNEY, S.H. STRUCHBURY & D. SWAINE (1989) Rapid detection of Salmonella in food: A convenient two-day procedure. Lett. Appl. Microbiol. 8:139-142.
- ISO Standard 6579-1 (2017) Microbiology of food chain - Horizontal method for the detection, enumeration and serotyping of *Salmonella* - Part 1 : Detection of *Salmonella* spp.