

Technical Data Sheet

Rappaport-Vassiliadis Salmonella Enrichment Broth

acc. harm. EP/USP/JP

Ordering number: 1.07666.0500

Rappaport-Vassiliadis Salmonella Enrichment Broth is used for the selective enrichment of Salmonella with the exception of *Salmonella* Typhi and *Salmonella* Paratyphi A.

This medium complies with the specifications given by the harmonized methods of EP, USP, JP for Microbial Examination of Non-sterile Products: Tests for Specified Microorganisms.

Mode of Action

Soy peptone supports the growth of Salmonella. MgCl₂ and malachite green inhibit the growth of the accompanying bacterial flora. Furthermore the low pH increases the selectivity of the medium. The selectivity can be increased by incubation temperatures of 40.5 $^{\circ}$ C to 42.5 $^{\circ}$ C.

Salmonella Typhi and Salmonella Paratyphi are not able to grow on Rappaport Vassiliadis Medium.

Typical Composition

Peptone from Soymeal	4.5 g/l
MgCl ₂ * 6 H ₂ O	29 g/l
NaCl	8 g/l
K ₂ HPO ₄	0.4 g/l
KH ₂ PO ₄	0.6 g/l
Malachite Green Oxalate	0.036 g/l

Preparation

Suspend 42.5 g/l. Heat gently. If necessary dispense into test tubes. Autoclave gently (15 min at 115 $^{\circ}$ C).

The appearance of the broth is clear and dark-blue.

The pH value at 25 ℃ is in the range of 5.0-5.4.

Experimental Procedure and Evaluation

According to the recommendations of the harmonized version of EP and USP 0.1 ml of the non-selective enrichment in Tryptic Soy Broth (article number 105459) is transferred into 10 ml of Rappaport Vassiliadis Medium and incubated at 30 $^{\circ}$ C to 35 $^{\circ}$ C for 18 hours to 48 hours.

According to the recommendations of the harmonized version of USP 38 a subculture is prepared on XLD Agar (article number 105290) after selective enrichment in Rappaport Vassiliadis Medium.

Storage

The product can be used for sampling until the expiry date if stored upright, protected from light and properly sealed at +15 $^{\circ}$ C to +25 $^{\circ}$ C.

After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed at +15 $^{\circ}$ C to +25 $^{\circ}$ C.

The prepared culture medium can be stored in the refrigerator for at least 7 months (Vassiliadis et al. 1985).

Disposal

Please mind the respective regulations for the disposal of used culture medium (e.g. autoclave for 20 min at 121 $^{\circ}$ C, disinfect, incinerate etc.).

Quality Control

Control Strains	ATCC#	Inoculum CFU	Incubation	Expected Results
Salmonella Typhimurium	14028	10-100	18 h at 30-35 ℃	Growth
Salmonella abony	6017	10-100	18 h at 30-35 ℃	Growth
Staphylococcus aureus	6538	≥ 100	24 h at 30-35 ℃	No growth

Please refer to the actual batch related Certificate of Analysis.



Literature

European Directorate for the Quality of Medicines and Healthcare. (2014): The European Pharmacopoeia. 8th Ed. Chapter 2.6.13 Microbiological examination of non-sterile products: Test for specified products. Strasbourg, France.

Japanese Ministry of Health, Labour and Welfare. (2011): The Japanese Pharmacopoeia. 16th Ed. Chapter 4.05 Microbial Limit Test II. Microbiological examination of non-sterile products: Test for specified products. Japanese Ministry of Health, Labour and Welfare. Tokyo, Japan.

Peterz, M., Wiberg C. and Norberg P. (1989). The effect of incubation temperature and magnesium chloride concentration on growth of *Salmonella* in homemade and commercially available dehydrated Rappaport-Vassiliadis broths. J. Appl. Bacteriol. **66**:523-528.

Rappaport, F., Konforti N., and Navon B. (1956): A new enrichment medium for certain *Salmonellae*. J. Clin. Pathol. **9**: 261-266.

United States Pharmacopoeia 38 NF 33 (2015): <62> Microbiological examination of non-sterile products: Tests for specified microorganisms.

Vassiliadis, P., Mavrommati, CH., Efstratitou, M. and Chromas, G. (1985): A note on the stability of Rappaport-Vassiliadis enrichment medium. J. Appl. Bact. **59**: 143-145.

Ordering Information

Product	Cat. No.	Pack size	Other pack sizes available
Rappaport-Vassiliadis Salmonella Enrichment Broth	1.07666.0500	500 g	
Tryptic Soy Broth	1.05459.0500	500 g	5 kg, 25 kg
XLD Agar	1.05290.0500	500 g	

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