



Rappaport Vassiliadis Enrichment Broth

Selective liquid medium for detection of *Salmonella* according to EP/USP/JP.

INTENDED PURPOSE

For the selective enrichment of *Salmonella* species from pharmaceutical and other materials. This medium is not intended for use in the diagnosis of disease or other conditions in humans.

DESCRIPTION

Rappaport Vassiliadis Enrichment Broth meets the requirements of the Harmonized method in the European Pharmacopoeia (EP), the United States Pharmacopoeia (USP), and the Japanese Pharmacopoeia (JP) for microbial examination of non-sterile products: Tests for specified microorganisms.

TYPICAL FORMULA* (Per Liter of Purified Water)

Soya Peptone	4.5 g
Magnesium Chloride Hexahydrate	29.0 g
Sodium Chloride	8.0 g
Potassium Phosphate	0.4 g
Dipotassium Hydrogen Phosphate	0.6 g
Malachite Green	0.036 g
Final pH 5.2 ± 0.2 at 25°C	

*Adjusted and/or supplemented as required to meet performance specifications.

METHOD PRINCIPLE

Soya peptone provides amino acids, nitrogen, carbon, minerals and vitamins for organisms growth. Sodium chloride maintains the osmotic balance of the medium. Potassium phosphates act as a buffer. Magnesium chloride and malachite green are the selective agents. The low pH helps inhibit non-target organisms.

MATERIALS REQUIRED BUT NOT PROVIDED

Standard microbiological supplies and equipment such as: sterile loops/swabs, solid culture media, incubator, quality control organisms.

TEST PROCEDURE

Following the Harmonized EP/USP/JP method, transfer 0.1 ml of the non-selective enrichment culture obtained in Tryptic Soy Broth (TSB also known as Casein Soya Bean Digest Broth) to a tube containing 10 ml of Rappaport Vassiliadis Enrichment Broth.

Incubate the selective enrichment tubes at 30-35°C for 18-24 hours.

INTERPRETING RESULTS

Subculture the broth on plates of Xylose Lysine Deoxycholate (XLD) agar and incubate at 30-35°C for 18-48 h.

The possible presence of *Salmonella* is indicated by the growth of well-developed, red colonies, with or without black centers. Suspect colonies should be confirmed by identification tests.

Refer to the technical sheet of the solid medium for more detailed information.

STORAGE

Store at 10-25°C away from light. Do not use the product beyond its expiry date on the label or if product shows any evidence of contamination or any sign of deterioration.

SHELF LIFE

2 years.

QUALITY CONTROL

Appearance of medium: Clear, blue.

Expected Cultural Response:

Control strains	Inoculum	Incubation	Specification
<i>Salmonella</i> Typhimurium ATCC® 14028	≤100 CFU	18 h/ 30-35°C	Good growth
<i>Salmonella</i> Abony NCTC 6017			
<i>Staphylococcus aureus</i> ATCC® 6538	>100 CFU	24 h/ 30-35°C	No growth

Please refer to the actual batch related Certificate of Analysis (CoA).

PERFORMANCE CHARACTERISTICS

Performance testing of Rappaport Vassiliadis Enrichment Broth was carried out using the QC strains listed above. The results obtained met the established criteria.

LIMITATIONS

Invalid results can be caused by poor sample quality, improper sample collection, improper transportation, improper laboratory processing, or a limitation of the testing technology. The operator should understand the principles of the procedures, including its performance limitations, in advance of operation to avoid potential mistakes.

Certain *Salmonella* strains, such as *S. Typhi* and *S. Paratyphi*, may fail to grow on this medium.

WARNING AND PRECAUTIONS

For professional use only. Operators must be trained and have certain experience. Please read the instructions carefully before using this product. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this document.

Consult the Safety Data Sheet (SDS) for information regarding hazards and safe handling practices.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

BIBLIOGRAPHY

See the references at the end of this document.

TABLE OF SYMBOLS

See the table of symbols at the end of this document.

ORDER INFORMATION

Product	Format	Packaging	Ref.
Rappaport Vassiliadis Enrichment Broth acc. to EP/USP/JP	20x100mm Tube	100 x 10 ml	26401

Revision History

Revision	Release Date	Change Summary
0	2025-08-13	Document creation

This IFU document and the SDS are available from the online Support Center:

liofilchem.com/ifu-sds

References

1. United States Pharmacopeial Convention (2014) The United States Pharmacopeia 38/National Formulation 33, Supp. 2. Chapter <61> Microbiological examination of non-sterile products: Microbial enumeration tests and Chapter <62> Microbiological examination of non-sterile products: Test for specified products. Chapter <71> Sterility Tests. Rockville, Md., USA.
2. European Directorate for the Quality of Medicines and Healthcare (2014) The European Pharmacopoeia. 8th Ed. Chapter 2.6.12 Microbiological examination of non-sterile products: Microbial enumeration tests and Chapter 2.6.13 Microbiological examination of non-sterile products: Test for specified products. Strasbourg, France.
3. Japanese Ministry of Health, Labour and Welfare (2011) The Japanese Pharmacopoeia. 16th Ed. Chapter 4.05 Microbial Limit Test I. Microbiological examination of non-sterile products: Total viable aerobic count and II. Microbiological examination of non-sterile products: Test for specified products. Japanese Ministry of Health, Labour and Welfare. Tokyo, Japan.
4. Vassiliadis, P. (1983) The Rappaport—Vassiliadis (RV) enrichment medium for the isolation of salmonellas: An overview. Journal of Applied Bacteriology, 54(1):69-76.
5. Rappaport, F., Konforti, N., & Navon, B. (1956) A New Enrichment Medium for Certain Salmonellae. Journal of Clinical Pathology, 9(3):261-266.

Table of Symbols

	Batch code
	Catalogue number
	Manufacturer
	Use by
	Fragile, handle with care
	Temperature limitation
	Contains sufficient for <n> tests
	Consult instructions for use
	Do not reuse
	Keep away from sunlight



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