



Rappaport Vassiliadis Soy (RVS) Broth

Selective liquid medium for detection of *Salmonella*,
according to ISO 6579-1.

INTENDED PURPOSE

Rappaport Vassiliadis Soy (RVS) Broth is a liquid culture medium used for the selective enrichment of *Salmonella* spp. from food, animal feed and environmental samples.

DESCRIPTION

Rappaport Vassiliadis Soy (RVS) Broth was modified by Vassiliadis by reducing malachite green concentration and increasing incubation temperature, thus offering a better stability of the pH of the prepared medium and optimizing the concentration of magnesium chloride, resulting in an improved recovery of *Salmonellae*.

This medium meets the requirements of ISO 6579-1.

TYPICAL FORMULA*

	(g/l)
Enzymatic Digest of Soya	4.5
Sodium Chloride	7.2
Potassium Dihydrogen Phosphate (KH ₂ PO ₄)	1.26
Dipotassium Hydrogen Phosphate (K ₂ HPO ₄)	0.18
Magnesium Chloride Anhydrous	13.4
Malachite Green	0.036
Final pH 5.2 ± 0.2 at 25°C	

*Adjusted and/or supplemented as required to meet performance specifications.
Grams per liter of purified water

METHOD PRINCIPLE

Enzymatic digest of soya 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: inoculating loops, sterile cotton swabs, physiological solution, incubator, quality control organisms.

TEST PROCEDURE

Following the method described in the [ISO 6579-1](#), transfer 0.1 ml of the culture obtained in the pre-enrichment (Buffered Peptone Water) to a tube containing 10 ml of the RSV Broth.

Incubate at 41.5 ± 1°C for 24 ± 3 hours.

Use the culture obtained to inoculate the selective solid media, i.e. XLD Agar and a second isolation agar.

For more information, see the ISO document.

Note: For some products, like dried milk products and cheese, it may be necessary to incubate the selective enrichment medium for an additional 24 h.

After incubation, the selective enrichment can be stored refrigerated at 5 ± 3°C for up to 72 h.

INTERPRETING RESULTS

The presence of turbidity compared to uninoculated control, or a pellicle formation indicates microbial growth. Subculture to suitable solid media for complete identification of the isolated colonies.

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

Medium in tubes: 2 years.

Medium in bottles: 3 years

QUALITY CONTROL

Appearance of medium: Clear, blue.

Expected Cultural Response:

Control strains	WDCM	Inoculum	Incubation	Specification
<i>Salmonella</i> Typhimurium + <i>Escherichia coli</i> + <i>Pseudomonas aeruginosa</i>	00031 00012 or 00013 00025	≤100 CFU	24 ± 3 h / 41.5 ± 1°C	>10 characteristic colonies on XLD agar or other medium of choice
<i>Salmonella</i> Enteritidis + <i>Escherichia coli</i> + <i>Pseudomonas aeruginosa</i>	00030 00012 or 00013 00025			
<i>Escherichia coli</i>	00012 or 00013	>10 ³ CFU		Partial inhibition ≤100 colonies on TSA
<i>Enterococcus faecalis</i>	00009 or 00087			<10 colonies on TSA

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

PERFORMANCE CHARACTERISTICS

Performance testing of Rappaport Vassiliadis Soy (RVS) 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.

Growth depends on the requirements of each individual microorganism. It is therefore possible that certain strains which have specific requirements (substrate, temperature, incubation conditions, etc.) may not develop.

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 Soy (RVS) Broth	16x100mm Plastic Tube with screw cap and self-standing base		100 x 10 ml	26400P
	Bottle		6 x 100 ml	402550

Revision History

Revision	Release Date	Change Summary
0	2024-10-22	Document creation
1	2025-09-15	Shelf life and order information revised to include the medium in bottle

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

liofilchem.com/ifu-sds

References

1. EN ISO 11133:2014+Amd1:2018+Amd2:2020. Microbiology of food, animal feed and water – Preparation, production, storage and performance testing of culture media.
2. ISO 6579-1:2017. Microbiology of the food chain - Horizontal method for the detection, enumeration and serotyping of Salmonella spp. Part 1: Detection of Salmonella spp.
3. Vassiliadis, P. (1983) The Rappaport—Vassiliadis (RV) enrichment medium for the isolation of salmonellas: An overview. *Journal of Applied Bacteriology*, 54(1):69-76.
4. 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



Liofilchem® s.r.l.

Via Scozia, 64026 Roseto degli Abruzzi (TE) Italy

Tel. +39 0858930745 Fax +39 0858930330 www.liofilchem.com liofilchem@liofilchem.com