

**Rappaport Vassiliadis broth (RV-T)***For microbiological control only*Selective enrichment broth for detection of *Salmonella* in food**SUMMARY AND EXPLANATION**

Rappaport Vassiliadis broth (containing malachite green and magnesium chloride) is a selective enrichment broth used for the detection of *Salmonella* in food.

It is generally used in parallel with Selenite Cystine (SC) broth. Use of Rappaport Vassiliadis broth is described in certain standards (1) and validated methods.

**PRINCIPLE**

Rappaport Vassiliadis broth contains a peptone base which favors the growth of *Salmonella*.

It contains potassium dihydrogen phosphate for improved pH stability, and magnesium chloride at a concentration which reduces the toxic effect of malachite green and ensures selectivity of the medium (2).

**CONTENT OF THE KIT**

	<b>Ready-to-use medium</b>
<b>REF 42 073</b>	20 x 10 ml tubes

**COMPOSITION****Theoretical formula.**

**This medium can be adjusted and/or supplemented according to the performance criteria required:**

Casein peptone (bovine) .....	4.5 g
Sodium chloride.....	7.2 g
Monopotassium phosphate .....	1.4 g
Magnesium chloride (anhydrous) .....	16.2 g
Malachite green oxalate .....	0.033 g
Purified water .....	1 l

pH 5.5

**REAGENTS AND MATERIAL REQUIRED BUT NOT PROVIDED****Reagents**

- Buffered Peptone Water (Ref. 42 042 or 42 043)
- Selenite Cystine (SC) broth (Ref. 42 052)
- XLD agar (Ref. 43 563 / 43 564) or modified Brilliant Green (Ref. 43 588) agar
- chromID™ *Salmonella* agar (Ref. 43 621 / 43 629) or Hektoen agar (Ref. 43 111)

**Material**

- Bacteriology incubator.

**WARNINGS AND PRECAUTIONS**

- **For microbiological control only.**
- **For professional use only.**
- All specimens, microbial cultures and inoculated products should be considered infectious and handled appropriately. Aseptic technique and usual precautions for handling the bacterial group studied should be observed throughout this procedure. Refer to "CLSI® M29-A, *Protection of Laboratory Workers From occupationally Acquired Infections; Approved Guideline – Current Revision*". For additional information on handling precautions, refer to "Biosafety in Microbiological and Biomedical Laboratories – CDC/NIH – Latest edition", or the current regulations in the country of use.
- Culture media should not be used as manufacturing material or components.
- Do not use reagents past the expiry date.
- Do not use tubes which show signs of contamination.
- Before use, check that the tube cap is intact.
- Microscopic elements, possibly coming from dead micro-organisms, may be observed in the broth, but this does not alter the performance of the medium.
- The medium should be used according to the procedure indicated in this package insert. Any change or modification in the procedure may affect the results.

**STORAGE CONDITIONS**

- **Store the tubes in their box at 2-8°C until the expiry date.**

**SPECIMENS**

Follow the recommendations in the current standards to perform specimen collection and preparation.

**INSTRUCTIONS FOR USE**

Traditional method:

1. **Allow the tubes to come to room temperature.**
2. After non-selective pre-enrichment in Buffered Peptone Water incubated for 18h ± 2h at 37°C ± 1°C, transfer a 0.1 ml sample volume to a tube containing RV broth.
3. Incubate at 42°C ± 1°C for 18-24 hours.

Note: RV broth is used in parallel with SC broth.

**READING AND INTERPRETATION**

- Isolation is then generally performed on XLD or modified Brilliant Green agar or on another selective agar medium (e.g. chromID™ *Salmonella* agar, Hektoen agar etc.) .
- Follow the procedure indicated in the package inserts of the selected isolation media.

## QUALITY CONTROL

Rappaport Vassiliadis broth is designed and developed to meet the strictest quality requirements.

The results of the strains tested in the batch by batch quality control are given on the quality control certificate available on request.

The quality control is performed according to the recommendations of the standard XP CEN ISO/TS 11133-2 (3).

## LIMITATIONS OF THE METHOD

- Given the wide variety of specimens studied, it is the responsibility of the user to validate this medium for its specific intended use.

## WASTE DISPOSAL

Unused reagents may be considered as non hazardous waste and disposed of accordingly.

Dispose of all used reagents as well as any other contaminated disposable materials following procedures for infectious or potentially infectious products.








It is the responsibility of each laboratory to handle waste and effluents produced according to their nature and degree of hazardousness and to treat and dispose of them (or have them treated and disposed of) in accordance with any applicable regulations.

## LITERATURE REFERENCES

- Microbiologie des aliments. - Recherche des Salmonella. Méthode de routine. - NF V 08-052 - Mai 97 - AFNOR - ISSN 0335-3931.
- PETERZ M., WIBERG C., NORBERG P. - The effect of incubation temperature and magnesium chloride concentration on growth of *Salmonella* in home-made and in commercially available dehydrated Rappaport-Vassiliadis broths - *J. Appl. Bacteriol.* 1989, vol 66, p. 523-28.
- XP CEN ISO/TS 11133-2 (January 2004) - Microbiology of food and animal feeding stuffs. Guidelines on preparation and production of culture media. Part 2: Practical guidelines on performance testing of culture media.
- CORRY J.E.L. et al. - Chapter 13 : Media for the isolation of *Salmonella*. p 195-208 - Rappaport-Vassiliadis (RVS) broth p. 574-576 - Handbook of Culture Media for Food Microbiology, Elsevier Science B.V., Vol. 37, 2003.
- MAIJALA R., JOHANSSON T., HIRN J. - Growth of *Salmonella* and competing flora in five commercial Rappaport-Vassiliadis (RV) - media - National Veterinary Institute, Helsinki, Finland, 1992.
- VASSILIADIS P. - The Rappaport-Vassiliadis (RV) enrichment medium for the isolation of *Salmonella*: an overview - *J. Appl. Bacteriol.*, 1983, vol. 54, p. 69-76.

- VASSILIADIS P., PATERAKI E., PAPAICONOMOU N. et al. - A new procedure of « *Salmonella* » enrichment - *Ann microbiol. Institut Pasteur*, 1976, vol. B 127, p. 195-200.
- VASSILIADIS P., TRICHOPOULOS D., PAPADAKIS J., KALAPOTHAKI V., ZAVITSANOS X, SERIE CH - *Salmonella* isolation with Rappaport's enrichment medium of different compositions - *Zbl. Bakt. Hyg. I. Abt. Orig.*, vol. B 173, 1981, p. 382-389.

## INDEX OF SYMBOLS

Symbol	Meaning
	GB : Catalogue number US : Catalogue number
	Manufacturer
	Temperature limitation
	Use by
	Batch code
	Consult Instructions for Use
	Contains sufficient for <n> tests

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