

Rappaport-VASSILIADIS Salmonella Enrichment Broth (acc. harm. method of EP/USP/JP)

RVS Broth

For the selective enrichment of *Salmonella* with the exception of *S. typhi* and *S. paratyphi* A

General Information

This medium complies with the recommendations of the harmonised method in the European Pharmacopeia and the United States Pharmacopeia 29 (2006).

Mode of Action

The malachite green and magnesium chloride concentrations of the present culture medium are less than those of the Salmonella Enrichment Broth according to RAPPAPORT in order to improve the growth of Salmonella at 43 °C. Peptone from soymeal is also used for the same reason. Lowering pH to 5.2 increases selectivity.

Typical Composition (g/litre)

Peptone from soymeal 4.5; magnesium chloride hexahydrate 29.0; sodium chloride 8.0; di-potassium hydrogen phosphate 0.4; potassium di-hydrogen phosphate 0.6; malachite-green 0.036.

Preparation

Suspend 42.5 g/litre, heat gently, if necessary dispense into test tubes, autoclave gently (15 min at 115 °C).

pH: 5.2 ± 0.2 at 25 °C.

The broth is clear and dark-blue.

Quality Control

Test strains	Inoculum (CFU)	Growth after 18 - 24 h
<i>Salmonella typhimurium</i> ATCC 14028	< 100	+
<i>Salmonella abony</i> NCTC 6017	< 100	+
<i>Staphylococcus aureus</i> ATCC 6538	> 100	none

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

Experimental Procedure and Evaluation

Inoculate the culture medium with the sample or material from a pre-enriched culture (e.g. Tryptic Soy Broth) and incubate for *Salmonella* 18-24 h at 35-37 °C and for *S. aureus* up to 24 hours at 41.5 °C. Streak material from the resulting cultures onto selective culture media (XLD Agar (acc. EP/USP/JP)).

Literature

European Pharmacopeia 5.6, Chapter 2.6.13 B (Harmonised Method), 2006
 United States Pharmacopeia 29 - NF 24, Chapter 62, Microbial examination of nonsterile products: Tests for specified microorganisms, 2006
 VASSILIADIS, P., MAVROMMATI, CH., EFSTRATIOU, M., a. CHROMAS, G.: A note on the stability of Rappaport-Vassiliadis enrichment medium. - *J. Appl. Bact.*, 59; 143-145 (1985).

Ordering Information

Product	Ordering No.	Pack size
RAPPAPORT - VASSILIADIS Salmonella Enrichment Broth (acc. Harm. Method EP/USP/JP)	1.07666.0500	500 g