RAPPAPORT VASSILIADIS SOY (RVS) BROTH

Ready to use tubes

INTENDED USE

Ready to use selective liquid medium for the enrichment of *Salmonella*.

TYPICAL FORMULA (g/l)

Soy Peptone	4.500
Sodium Chloride	7.200
Potassium Dihydrogen Phosphate	1.260
Dipotassium Hydrogen Phosphate	0.180
Magnesium Chloride	13.580
Malachite Green Oxalate	0.036

Final pH 5.2 ± 0.2

DESCRIPTION

Rappaport Vassiliadis Soy (RVS) Broth is used as a selective enrichment medium for the isolation of *Salmonella* from food, water and environmental specimens. RVS Broth has the same formulation as Rappaport Vassiliadis Medium, except for the addition of dipotassium hydrogen phosphate, and reduced concentration levels of magnesium chloride and potassium dihydrogen phosphate.
The modified buffer salts concentration allows a better maintenance of pH and an improved isolation of salmonellae. RVS Broth is based on the revised formula described by van Schothorst et al.
Rappaport Vassiliadis Soy (RVS) Broth is recommended by ISO 6579:2002 the horizontal method for detection *Salmonella* spp. (including *S.typhi*) in foodstuffs, together with Mulller Kauffman Tetrathionate Novobiocin Broth.

TECHNIQUE

1. The procedure recommended by ISO 6579:2002, is as follows:
2. Add 25g sample portion to 225ml of Buffered Peptone Water. If the required test portion is other than 25g, use a suitable quantity of Buffered Peptone Water to yield approximately 1/10 dilution (m/v).
3. Incubate the initial suspension at 37°C for a minimum of 16 hours and not more than 20 hours.
4. Transfer 0.1ml of the pre-enriched culture to a tube containing 10ml of Rappaport Vassiliadis Soy (RVS) Broth and 1ml to a flask containing 10ml of Mueller Kauffmann Novobiocin Broth (MKTTn)
5. Incubate the inoculated RVS Broth at 41.5°C ± 1°C for 24hrs ± 3hrs.
6. Incubate the inoculated MKTTn at 37°C ± 1 for 24hrs ± 3.
7. Using a culture obtained from the RVS Broth inoculate by means of a 3mm loop, a large-size Petri dish or two 90mm Petri dishes containing XLD Medium (REF 402206), proceed in the same way from the enrichment tube by inoculating a second plating medium (e.g. Chromogenic Salmonella Agar (REF 405350), or another suitable selective *Salmonella* plating-out medium chosen by the laboratory).
8. Using the cultures obtained in MKTTn after 24 hours of incubation, repeat the procedure with the same two selective plating-out media.
9. Invert the dishes and incubate at 37°C for 24hrs. ± 3 hrs.
10. Examine for the presence of typical colonies. For confirmation take from each dish of each selective medium at least one typical or suspected colony and a further 4 colonies if the first is negative. Streak the selected colonies onto the surface of Nutrient Agar and incubate at 37°C for 24hrs. Use pure cultures for biochemical and serological confirmation. Biochemical confirmation tests include: TSI Agar, Urea Agar, L-Lysine Decarboxylase Medium, detection of β-galactosidase, VP reaction, indole detection. Serological confirmation includes the detection of the presence of *Salmonella* O-, Vi- and H antigens by slide agglutination test. Biochemical confirmation can be substituted with the rapid test MUCAP (REF 191500). All the colonies MUCAP positive must be serologically confirmed.

REFERENCES

• ISO 6579 Microbiology of food and animal foodstuff - Horizontal method for the detection of Salmonella spp. 2002.
• Van Schothorsts, M., Renaud, A., van Beek, C. (1987) Food Microbiology **4**, 11-18

STORAGE

Store at 2-8° away from direct light - When stored as directed the tubed media remain stable until the expiry date shown on the label. Do not use beyond stated expiry date. Media should not be used if there are any signs of deterioration, discoloration or contamination.

PRECAUTIONS

For *in vitro* diagnostic use only. Observe approved biohazard precautions and aseptic techniques. To be used only by adequately trained and qualified laboratory personnel. Sterilize all biohazard waste before disposal.

PACKAGING

551981	**Rappaport Vassiliadis Soy (RVS) Broth,**	**20 x 10 ml ready to use tubes**