Modified Rappaport Vassiliadis Medium, Granulated

GM1137

Modified Rappaport Vassiliadis Medium, granulated is recommended as a selective enrichment medium for the isolation of *Salmonella* species from food and environmental specimens.

Composition**

Ingredients	Gms / 1110 ml
Peptone from soyabean	5.000
Sodium chloride	8.000
Monopotassium phosphate	1.600
Magnesium chloride, $6H_2O$	40.000
Malachite green	0.040
Final pH (at 25°C)	5.2±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 30.07 grams (the equivalent weight of dehydrated medium per litre) in 1000 ml distilled water. Heat gently if necessary to dissolve the medium completely. Dispense into tubes or flasks as desired. Sterilize by autoclaving at 115°C for 15 minutes.

Principle And Interpretation

Modified Rappaport Vassiliadis Medium is a selective broth for the enrichment of *Salmonella* from foodstuffs, environment and clinical specimens. The original formulation described by Rappaport et al (1) with magnesium chloride hexahydrate was modified by Vassiliadis et al (2) by lowering the concentration of malachite green and raising the incubation temperature to 43°C. This medium is recommended as the selective enrichment medium for isolation of *Salmonella* from food and environmental specimens.

The test specimen is added to Buffered Peptone Water (GM614/M614) and incubated at 35°C for 16 - 20 hours. This pre-enriched peptone water culture is inoculated into Modified Rappaport Vassiliadis Medium and incubated at 42 ± 1°C for 24 - 48 hours and further subcultured on Brilliant Green Agar (M016).

Quality Control

Appearance

Light yellow to light blue coloured granular medium

Colour and Clarity of prepared medium

Blue coloured clear solution without any preciitate

Reaction

Reaction of 3.0% w/v aqueous solution at 25°C. pH : 5.2±0.2

pH

5.00-5.40

Cultural Response

Cultural characteristics observed after an incubation at different temperatures for 24-48 hours, when subcultured on Brilliant Green Agar Base (M016) and then incubated at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Recovery at 37°C	Recovery at 42 ± 1°C	Colour of colony
Escherichia coli ATCC 25922	50-100	fair	poor	yellowish green
Salmonella Paratyphi *B ATCC 8759*	50-100	good	good	pink white
Salmonella Enteritidis *ATCC 13076*	50-100	luxuriant	luxuriant	pink white

Salmonella Typhi *ATCC 6539*	50-100	fair-good	fair	pink red
Salmonella Typhimurium *ATCC 14028*	50-100	luxuriant	luxuriant	pink white

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference

1. Rappaport F., Konforti N. and Navon B., 1956, J. Clin. Path., 9:261.
2. Vassiliadis P. Pateraki E., Papaiconomou N., Papadaicis J. A., Trichopoulos D., 1976, Annales de Microbiologie (Institute Pasteur), 127B : 195.

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