Rappaport Vassiliadis Soyabean Meal Broth (RVSM Broth)

Intended Use
A medium recommended as selective enrichment medium for the isolation of *Salmonella* species.

Summary
Rappaport Vassiliadis Soyabean Meal Broth (RVSM) is modification of the Rappaport Vassiliadis Enrichment Broth, revised by van Schothorst. This medium is recommended as the selective enrichment medium for isolation of Salmonella. van Schothorst modified the original formula by addition of dipotassium hydrogen phosphate to buffer the medium and addition of anhydrous magnesium chloride to enhance the reliability of enrichment broth. Peterz *et al.,* have also emphasized the importance of the concentration of magnesium chloride in the final medium. The test specimen is added to Buffered Peptone Water (201020370500) and incubated at 35°C for 16 -20 hours. This pre-enriched peptone water culture is inoculated into RVSM Broth and incubated at 42±1°C for 24-48 hours and further subcultured on Brilliant Green Agar modified (201020270500). For faecal specimens, no pre-enrichment is needed. Add 1 or 2 loopfuls of liquid faeces (or an emulsion of faeces in saline) to 10 mL of RVSM Broth pre-warmed to 42°C. Incubate at 42 ±1°C for 24 hours and streak on to a selective agar.

Principle
Papaic digest of soyabean meal provides essential growth nutrients. Sodium chloride maintains the osmotic balance. Magnesium chloride raises the osmotic pressure in the medium. Malachite green is inhibitory to organisms other than *Salmonellae*. The low pH of the medium, combined with the presence of malachite green and magnesium chloride, helps to select for the highly resistant *Salmonella* species. Phosphates buffer the medium to maintain the constant pH.

Formula*

Ingredients	**g/L**
Papaic Digest of Soyabean Meal	4.5
Sodium Chloride	7.2
Potassium dihydrogen phosphate	1.40
Dipotassium hydrogen phosphate	0.20
Magnesium chloride, hexahydrate	28.60
Malachite green	0.036
Final pH (at 25°C)	5.2 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen
Clinical samples

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.
The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 26.58 g (the equivalent weight of dehydrated culture media) of the powder in 1000 mL purified/distilled water.
2. Heat gently if necessary, to dissolve the powder completely.
3. Dispense as desired into tubes and sterilize by autoclaving at 115°C (10 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated Appearance: Light yellow to light blue homogeneous free flowing powder.
Prepared Appearance: Blue coloured clear solution without any precipitate.
Growth Promotion Test: Growth is observed after an incubation for 18-24 hours for following temperature.

Organism (ATCC)	Growth at 42±1°C	Growth at 35°C-37°C
Escherichia coli (25922)	Partial Inhibition	Poor
Salmonella paratyphi B (8759)	Good	Good
Salmonella typhi (6539)	Partial Inhibition to Good	Partial Inhibition
Salmonella typhimurium (14028)	Good	Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Use and Disposal of Dehydrated Media

Inoculation of culture media with bacteria, deliberately and accidentally, leads to a very great number of organisms being produced. High concentrations of any organisms are potentially hazardous and must be disposed off safely. Therefore, after use, prepared plates, samples, sample containers or other contaminated material must be sterilized or incinerated before discarding. All autoclaved biohazards should be disposed off in accordance with state and local environmental regulations.
Only qualified personnel who have been trained in microbiological procedures should handle all infected specimens and inoculated culture media. User should ensure that any machinery or apparatus used and by chance contaminated must be safely disinfected or sterilized. The environment in which microbiological cultures are handled must also be considered.

Warranty

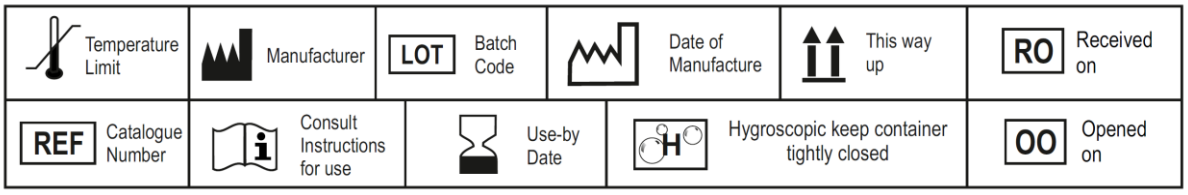
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

References

1. Rappaport F., Konforti N. and Navon B., 1956, J. Clin. Pathol., 9, 261-266
2. Van Schothorst M., Renauld A. and VanBeek C., 1987, Food Microbiol., 4:11-18.
3. Van Schothorst M. and Renauld A., 1983, J. Appl. Bacteriol., 54:209-215.
4. Peterz M., Wiberg C. and Norberg P., 1989, J. Appl. Bacteriol., 66,523-528.
5. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201180410100	Dehydrated Culture Media	100 g
201180410500	Dehydrated Culture Media	500 g



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Disclaimer
Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.