

PRODUCT INFORMATION

Product Type: Bottle product (300ml)

Cat No. BP573 - Modified Semisolid Rappaport Vassiliadis Medium (MSRV)

Intended Use:

For the detection of motile *Salmonella* species from food and environment samples according to Regulations: ISO 11133 / ISO 6579.

Principles and uses

Modified Semisolid Rappaport Vassiliadis Medium (MSRV) is a selective medium used for the rapid detection of motile *Salmonella* spp. Is a modification of Rappaport Vassiliadis enrichment broth for detecting motile *Salmonella* spp. in feces, food products and environmental samples. In this medium the main detection is based on the motility and ability of *Salmonella* to migrate through selective medium ahead of competing motile microorganism, therefore producing opaque halos of growth.

The mobility of other microorganisms is inhibited by selective mediums (such as magnesium chloride, malachite green oxalate and novobiocin) as well as by the temperature of incubation at 42 °C.

Tryptose and acid casein peptone provide nitrogen, vitamins, minerals and amino acids essential for growth. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Magnesium chloride and malachite green oxalate are inhibitory to organisms other than *Salmonella* spp. Novobiocin is a selective agent that inhibits gram positive bacteria and avoids the development of *Proteus*.

This medium is not suitable for the detection of non-motile strains of *Salmonella* of which their presence is very low (=1%). It is recommended to conduct serological and biochemical tests for *Salmonella* species confirmation.

Instructions for use

For detection of *Salmonella* spp. in food, animal feed, animal faeces, and environmental samples according to ISO 6579:

- Pre-enrichment in non-selective liquid medium
- Enrichment in/on selective media:
- Inoculate, with the culture obtained in the pre-enrichment stage, the Modified Semisolid Rappaport Vassiliadis medium (MSRV).
- Incubate at 41.5 °C for 24±3 h.

Composition:

Bacteriological agar - 2.7 g/L

Magnesium chloride anhydrous - 10.9 g/L

Novobiocin - 0.01 g/L

Potassium dihydrogen phosphate - 1.5 g/L

Sodium chloride - 7.3 g/L

Enzymatic Digest of Plants & Animal Tissue - 4.6 g/L

Malachite green oxalate - 0.04 g/L

Acid hydrolysate of casein - 4.6 g/L

Storage: 2-8°C
pH at RT: 5.0 - 5.4
Appearance: Blue

Exp. Date: Printed on label and on the item.
Required materials not supplied: Laboratory equipment as required.

Warning and Precautions:

Warning and Precautions - For professional use only. Follow good microbiological lab practices while handling specimens and culture. Do not use Bottles if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration. Avoid freezing and overheating. The Bottles may be used / inoculated up to the expiration date and incubated for the recommended incubation times. After use and prior to discarding, specimen containers and all contaminated material, including the used culture media and contaminated culture containers, must be sterilized or incinerated by validated procedures. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.

Waste Disposal

After interpretation all items should be destroyed by standard incineration methods.

Performance Testing Results:

1. Dissolve the medium (MSRV 300 ml), cool to 48 Deg.C
2. Add to bottle MSRV suppl.-1 vial TT 533 (Novobiocin 3 mg/vial)
3. Pour the agar into the plates
4. Inoculum: picking from fresh colony culture and striking on a center of the plate.

TEST	ATCC	Incubation Temp. (°C)	Incubation Cond.	Reaction 1	
<i>Salmonella typhimurium</i>	14028	41-43 °C	Aerobic, 24 hours	Growth	Halo>25mm, background change from turquoise to greenish-yellow
<i>Salmonella enteritidis</i>	13076	41-43 °C	Aerobic, 24 hours	Growth	Halo>25mm, background change from turquoise
<i>Salmonella arizonae</i>	13314	41-43 °C	Aerobic, 24 hours	Growth	Halo>25mm, background change from turquoise to greenish-yellow
<i>Klebsiella pneumoniae</i>	13883	41-43 °C	Aerobic, 24 hours	Growth	Background w/o change
<i>Pseudomonas aeruginosa</i>	27853	41-43 °C	Aerobic, 24 hours	Growth	Halo<25mm, background w/o change
<i>Escherichia coli</i>	25922	41-43 °C	Aerobic, 24 hours	Scanty growth	Background w/o change
<i>Enterococcus faecalis</i>	19433	41-43 °C	Aerobic, 24 hours	Inhibited	