

# RAPPAPORT-VASSILIADIS (RV) ENRICHMENT BROTH (100 ML)

# **INTENDED USE:**

Rappaport Vassiliadis Salmonella Enrichment Broth is recommended for selective enrichment of Salmonella species from pharmaceutical products in accordance with the microbial limit testing by harmonized methodology of USP/EP/BP/JP.

# PRINCIPLE AND INTERPRETATION:

Salmonella generally survive at little high osmotic pressure, grow at slightly low pH and are resistant to malachite green compared to other bacteria. These characteristics are exploited in this medium for selective enrichment of Salmonella . Magnesium chloride present in the medium raises the osmotic pressure. Natural sugars of soya peptone provide essential growth nutrients and enhance the growth of Salmonella (8). Phosphate buffers the medium to maintain constant pH. Sodium chloride maintains the osmotic balance. Malachite green inhibits many gram-positive bacteria, while selectively enriches Salmonella. The relatively lower concentration of nutrition, also aids selective enrichment of Salmonella .This medium was reported to be superior to Salmonella selective medium like Tetrathionate Broth and Selenite enrichment broth and to TetrathionateBrilliant Green Broth for the detection of Salmonellae in milk samples. The enriched culture of Rappaport Vasiliadis Salmonella Enrichment Broth (MH1491) can be further subcultured and isolated on Xylose Lysine Deoxycholate Agar.

# **COMPOSITION:**

Ingredients	Gr/Liter
Soya peptone	5 gr
Sodium chloride	8 gr
Potassium dihydrogen phosphate	1,6 gr
Magnesium chloride 6H2O	40 gr
Malachite green	0,04 gr

\*\*\*Formula adjusted, standardized to suit performance parameters pH:  $5,2 \pm 0,2$ 

#### **PRECAUTIONS:**

For professional use only. Do not use tubes if they show evidence of microbial contamination, discoloration or other signs of deterioration.

# QUALITY CONTROL:

#### **1.Sterility Control:**

Incubation 48 hours at 30-35°C and 72 hours at 20-25°C: NO GROWTH

#### 2.Phsical/Chemical Control

**pH**:  $5,2 \pm 0,2$ **Apperance:** Medium is clear, may have a slight precipitate, dark turquoise

**3.Microbiological Control:** Incubation at a temperature of 41±2°C and observed after 24-48 hours.

Microorganism	Inoculum	Results	
	(CFU)	Growth	Reactions
Salmonella typhimurium ATCC 14028	10-100	Good	Medium change yellow
Enterococcus faecalis ATCC 29212	100-1000	Inhibition	Inhibition
Escherichia coli ATCC 8739	100-1000	Inhibition	Inhibition
Pseudomonas aeruginosa ATCC 9027	100-1000	Inhibition	Inhibition

# STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2 - 12°C. Use before expiry date on the label. Do not use beyond stated expiry date.



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# DISPOSAL:

Incubated medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected tube should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

# PACKAGING:

Katalog Number: 01117 Content/Packaging: Screw cap x 20 piece /box

# **REFERENCES:**

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- 5. European Pharmacopoeia, 2012, European Dept. for the quality of Medicines.4. Hirsch and Grinstead. 1954. J. Dairy Res. 21:101.
- 5. Barnes and Ingram. 1956. J. Appl. Bacteriol. 19:117.
- 6. Barnes, Despaul and Ingram. 1963. J. Appl. Bacteriol. 26:4154. Angelotti, 1963, Academic Press, New York, N.Y.

