

# TMKH 015 –RAPPAPORT VASSILIADIS SALMONELLA ENRICHMENT BROTH (USP/EP/JP/BP/IP)

### **INTENDED USE**

For selective enrichment of Salmonella species from pharmaceutical and clinical samples in accordance with harmonized method.

### PRODUCT SUMMARY AND EXPLANATION

Rappaport vassiliadis salmonella enrichment broth is used for enrichment and selective isolation of Salmonella species. It conforms to harmonized USP/EP/JP requirements. Rappaport et al. formulated an enrichment medium for Salmonella species that was modified by Vassiliadis et al. Rappaport Vassiliadis Salmonella Enrichment Broth medium is evaluated as an alternative of Rappaport-Vassiliadis (RV) Broth where Soya Peptone has replaced Enzymatic Digest of Casein as the nitrogen and vitamin source which has been reported to enhance the growth of Salmonella species.

# **COMPOSITION**

Ingredients	Gms / Ltr	
Magnesium chloride hexahydrate	29.00	
Sodium chloride	8.00	
Soya peptone	4.50	
Potassium dihydrogen phosphate	0.60	
Dipotassium phosphate	0.40	
Malachite green	0.036	

### **PRINCIPLE**

Sodium chloride maintains the osmotic balance in the medium. The low pH of the medium, combined with the presence of Malachite green and Magnesium chloride raises the osmotic pressure and Potassium dihydrogen phosphate acts as a buffer, selective for the highly resistant Salmonella species. Malachite green is inhibitory to organisms other than Salmonella sp. When Rappaport Vassiliadis Salmonella Enrichment Broth medium is combined w.ith direct culture and Selenite enrichment, 98.9% of Salmonella are recovered.

# **INSTRUCTION FOR USE**

Label the ready to use botttle. Inoculate the sample and Incubate at specified temperature and time.

# **QUALITY CONTROL SPECIFICATIONS**

**Appearance of Prepared media** : Turquoise blue colour, slightly hazy solution.

: Passes the release criteria. Sterility test

: 5.2±0.2 pH (at 25°C)

# INTERPRETATION

Cultural characteristics observed after inoculation (103 CFU/ml) and incubation.











Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Salmonella arizonae	13314	10 – 100	Good	42±1°C	24-48 Hours
Salmonella typhimurium	14028	50 – 100	Good	42±1°C	24-48 Hours
Salmonella enteritidis	13076	10 – 100	Good	42±1°C	24-48 Hours
Staphylococcus aureus	25923	50 - 100	Inhibited	42±1°C	24-48 Hours

### **PACKAGING:**

In pack size of 100 ml X 25 bottles.

### **STORAGE**

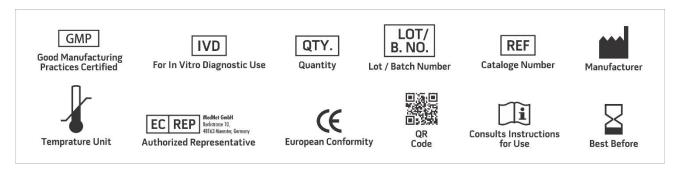
On receipt, store bottles in the dark at 10-25 °C. Avoid freezing and overheating. Do not open until ready to use. Minimize exposure to light. Bottled media stored as labeled until just prior to use may be inoculated up to the expiration date and incubated for the recommended incubation times. Allow the medium to warm to room temperature before inoculation

# **DISPOSAL**

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

### REFERENCES

- 1. The United States Pharmacopoeia. Amended Chapters 61, 62 & 111, The United States Pharmacopoeial Convention Inc., Rockville, MD. (2009).
- 2. Directorate for the Quality of Medicines of the Council of Europe (EDQM). The European Pharmacopoeia, Amended Chapters 2.6.12, 2.6.13, 5.1.4, Council of Europe, 67075 Strasbourg Cedex, France. (2007).
- 3. Japanese Pharmacopoeia. Society of Japanese Pharmacopoeia. Amended Chapters 35.1, 35.2, 7. The Minister of Health, Labor, and Welfare. (2008).
- 4. Rappaport, F., N. Konforti, and B. Navon. A new enrichment medium for certain salmonellae. J. Clin. Pathol. 9:261-266. (1956).
- 5. Vassiliadis, P., D. Trichopoulos, A. Kalandidi, and E. Xirouchaki. Isolation of salmonellae from sewage with a new procedure of enrichment. J. Appl. Bacteriol. 44:233-239. (1978).
- 6. VanSchothorst, M. and A. M. Renaud. J. Appl. Bact. 54:209-215. (1983).
- 7. McGibbon, L., E. Quail, and C. R. Fricker. Inter. J. Food Microbiol. 1:171-177. (1984).



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.















\*For Lab Use Only Revision: 08 Nov., 2019









