TMH 111 - RAPPAPORT VASSILIADIS SALMONELLA ENRICHMENT BROTH (as per USP/BP/EP/JP/IP)

INTENDED USE

For selective enrichment & isolation of *Salmonella* species from pharmaceutical products.

PRODUCT SUMMARY AND EXPLANATION

Rappaport Vassiliadis Salmonella Enrichment Broth is used for the enrichment and selective isolation of *Salmonella* species. It conforms to harmonized USP/EP/JP/BP/IP requirements. Rappaport et al. formulated an enrichment medium for *Salmonella* species. Which was modified by Vassiliadis et al. Rappaport Vassiliadis Salmonella Enrichment Broth medium is evaluated as an alternative of Rappaport-Vassiliadis (RV) Broth where Enzymatic Digest of Casein is replaced by Soya Peptone as the nitrogen and vitamin source.

COMPOSITION

Ingredients	Gms / Ltr
Magnesium chloride hexahydrate	29.000
Sodium chloride	8.000
Soya peptone	4.500
Potassium dihydrogen phosphate	0.600
Dipotassium phosphate	0.400
Malachite green	0.036

PRINCIPLE

The medium contains Sodium chloride which 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 provide selectivity for the highly resistant *Salmonella* species. Potassium dihydrogen phosphate and dipotassium phosphate buffers the medium to maintain a constant pH. Soya peptone acts as a source of essential nutrients & vitamins for enhancing the growth of *Salmonella*.

INSTRUCTION FOR USE

- Dissolve 42.50 grams of the medium in 1000 ml distilled water.
- Gently heat to boiling with swirling to dissolve the medium completely.
- Dispense as desired into tubes.
- Sterilize by autoclaving at 15 psi (115°C) for 30 minutes or as per validated cycle
- Cool to room temperature.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	:	Light yellow to light blue, homogeneous free flowing powder
Appearance of Prepared medium	:	Greenish blue coloured, clear to slightly opalescent solution
pH (at 25°C)	:	5.2±0.2

INTERPRETATION

Culture characteristics observed after incubation. Recovery was carried out using XLD Agar (TMH 112) after enrichment in Rappaport Vassiliadis Salmonella Enrichment Broth.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Colour of colony on XLD (TMH 112)	Recovery	Incubation Temperature	Incubation Period
Salmonella typhimurium	14028	50-100	Luxuriant	Red with black centres	≥70%	30-35°C.	18-24 Hours
Salmonella enteritidis	13076	50-100	Luxuriant	Red with black centres	≥70%	30-35°C.	18-24 Hours
Salmonella arizonae	13314	50-100	Luxuriant	Red with black centres	≥70%	30-35°C.	18-24 Hours
Escherichia coli	25922	50-100	None-Poor	Yellow	0-10%	30-35°C.	18-24 Hours
Escherichia coli	8739	50-100	None-Poor	Yellow	0-10%	30-35°C.	18-24 Hours
Staphylococcus aureus	25923	≥1000	Inhibited	-	0%	30-35°C.	18-24 Hours
Staphylococcus aureus	6538	≥1000	Inhibited	-	0%	30-35°C.	18-24 Hours

PACKAGING

In 100 & 500 gm packaging size.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use, if powder show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

DISPOSAL

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

REFERENCES

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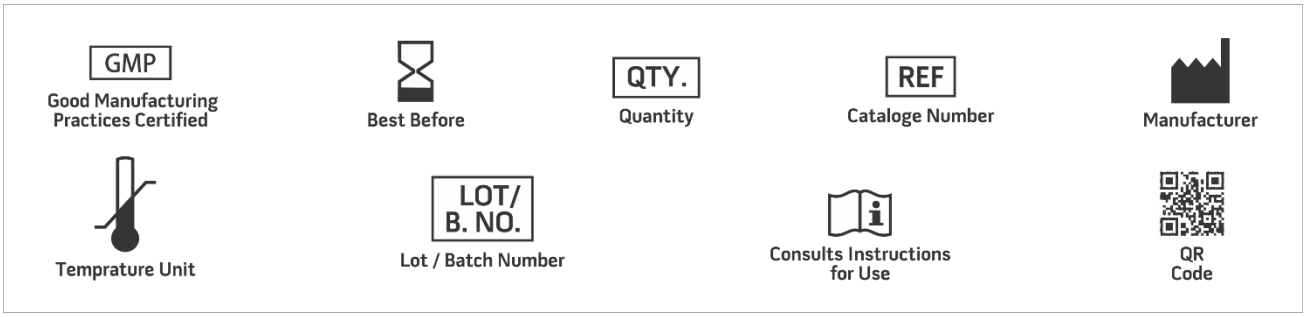

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For professional use only.**

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