

CM 22,709 - RAPPAPORT VASSILIADIS SALMONELLA ENRICHMENT BROTH (IP)

INTENDED USE

For selective enrichment of *Salmonella* species as per Indian pharmacopoeia.

PRODUCT SUMMARY AND EXPLANATION

Rappaport Vassiliadis Salmonella Enrichment Broth (IP) is designed according to the revised formulation by Van Schothorst et al and is recommended for the selective enrichment of *Salmonella* from pharmaceutical products. This medium can also be used in direct enrichment of samples containing low inoculum. Present medium is a modification of the Rappaport Vassiliadis Enrichment Broth described by Van Schothorst and Renault and is recommended by Indian Pharmacopoeia and is in accordance with the harmonized methodology of USP/EP/BP/JP has been found to be superior to other *Salmonella* selective medias. Addition of magnesium chloride to the medium was reported by Peterz et al. *Salmonella* species can be isolated from human faeces without pre-enrichment by using this medium. *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*.

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

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*. Phosphate buffers the medium to maintain constant pH. Sodium chloride maintains the osmotic balance. Malachite green inhibits many gram-positive bacteria, while selectively enriching *Salmonella*.

INSTRUCTION FOR USE

Inoculate the sample and incubate at specified temperature and time.

QUALITY CONTROL SPECIFICATIONS

Appearance of prepared medium	:	Bluish green coloured solution
Quantity of Medium	:	10 ml of medium in tubes.
pH (at 25°C)	:	5.2 ± 0.2
Sterility Check	:	Passes release criteria

INTERPRETATION

Cultural characteristics observed after incubation at for.

Microorganism	ATC C	Inoculum (CFU/ml)	Growth	% Recovery	Colour of colony	Incubation Temperature	Incubation Time
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<i>Escherichia coli</i>	259 22	50-100	None-Poor	0-10%	Yellow	30-35°C	18-24hours
<i>Escherichia coli</i>	873 9	50-100	None-Poor	0-10%	Yellow	30-35°C	18-24hours
<i>Salmonella enteritidis</i>	130 76	50-100	Luxuriant	≥ 50%	Red with black centre	30-35°C	18-24hours
<i>Salmonella paratyphi B</i>	875 9	50-100	Luxuriant	≥ 50%	Red with black centre	30-35°C	18-24hours
<i>Salmonella Typhi</i>	653 9	50-100	Luxuriant	≥ 50%	Red with black centre	30-35°C	18-24hours
<i>Staphylococcus aureus</i>	653 8	≥ 1000	Inhibited	≤ 0%	-----	30-35°C	18-24hours
<i>Staphylococcus aureus</i>	259 23	≥ 1000	Inhibited	≤ 0%	-----	30-35°C	18-24hours
<i>Salmonella Typhimurium</i>	140 28	50-100	Luxuriant	≥ 50%	Red with black centre	30-35°C	18-24hours

PACKAGING:

Pack of 25 Ready-To-Use Liquid Medium tubes containing 10 ml in each tube.
Pack of 50 Ready-To-Use Liquid Medium tubes containing 10 ml in each tube.

STORAGE

Onreceipt, store tubes in the dark at 10-25 °C. Avoid freezing and overheating. Do not open until ready to use. Minimize exposure to light. Tubed 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

Usermustensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques.

REFERENCES

1. TheUnited States Pharmacopoeia, 2018, The United States Pharmacopoeial Convention. Rockville, MD.
2. British Pharmacopoeia, 2017, The Stationery office British Pharmacopoeia
3. European Pharmacopoeia, 2017, European Dept. for the quality of Medicines.
4. Japanese Pharmacopoeia, 2008.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**

