Rappaport Vassiliadis Broth EP/USP

Cat. 1414

Enrichment medium for Salmonella

Practical information

Aplications	Categories
Selective enrichment	Salmonella

Industry: Water / Pharmaceutical/Veterinary / Food

Regulations: USP / European Pharmacopoeia

Principles and uses

Rappaport Vassiliadis Broth is recommended as the selective enrichment medium when isolating Salmonella species from food and environmental specimens and is recommended by the European Pharmacopoeia in Paragraph 2.6.13 “Microbiological examination of non-sterile products: test for specified microorganisms” for the test of Salmonella in products.

Soy peptone provides nitrogen, vitamins and amino acids, essential nutrients for growth. Potassium phosphates balance the low pH of the medium, combined with the presence of magnesium chloride to raise the osmotic pressure, and malachite green to inhibit other organisms.

This medium has been found to be superior to other Salmonella selective enrichment media, especially when small inocula and a preenrichment broth are used.

Formula in g/L

Dipotassium phosphate	0,4	Magnesium chloride anhydrous	13,58
Malaquite green	0,036	Monopotassium phosphate	0,6
Sodium chloride	8	Soy peptone	4,5

Preparation

Suspend 27,11 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 115 ºC for 15 minutes.

Instructions for use

For the test for specified microorganisms (Salmonella) according to European Pharmacopoeia:
- After preenrichment with Trypticasein Soy Broth (TSB) (Cat. 1224), transfer 0,1 ml to 10 ml of Rappaport Vassiliadis Broth.
- Incubate at 30-35 ºC for 18-24 hours.
- Subcultivate in plates of XLD Agar (Cat. 1080) and incubate at 30-35ºC for 18-48 hours.
- The possible presence of Salmonella is indicated by the growth of well developed, red colonies with or without black centers. These results can be confirmed with Identification tests.
- The product complies with the test if colonies of the types described are not present, or if the confirmatory identification tests are negative.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
w/o rests	Fine powder	Blue greenish	Blue	5,2±0,2

Microbiological test

According to European Pharmacopoeia:
Incubation conditions: (30-35 ºC / 18-24 h).

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Inoculation conditions: Productivity (<=100CFU) / Inhibitory (>=100 CFU).

Microrganisms	Specification
Salmonella typhimurium ATCC 14028	Good growth, turbidity
Staphylococcus aureus ATCC 6538	Inhibited

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

Bibliography

European Pharmacopeia 9.0

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