

TM 1831 – RAPPAPORT VASSILIADIS SOYA BROTH

INTENDED USE

For selective enrichment of Salmonella spp.

PRODUCT SUMMARY AND EXPLANATION

Rappaport Vassiliadis Medium, is a modification of the formulation by Van Schothorst et al and is recommended for the selective enrichment of Salmonellae from food specimens by FDA BAM, 1998. Salmonella generally survive at little high osmotic pressure, grow at slightly low pH and are resistant to malachite green compared to other bacteria. Salmonellae constitute the most taxonomically complex group of bacteria among the Enterobacteriaceae. Human Salmonella infections are most commonly caused by ingestion of food, water or milk contaminated by human or animal excreta. Contaminated eggs or foods containing eggs have also been a source of food borne salmonellosis.

COMPOSITION

Ingredients	Gms / Ltr		
Tryptone	5.000		
Sodium chloride	8.000		
Potassium dihydrogen phosphate	1.600		
Magnesium chloride hexahydrate	40.000		
Malachite green oxalate	0.040		

PRINCIPLE

The medium consists of Tryptone which provides essential growth nutrients. Magnesium chloride raises the osmotic pressure in the medium. Malachite green is inhibitory to organisms other than Salmonellae. The low pH of the medium, combined with the presence of malachite green and magnesium chloride, helps to select for the highly resistant Salmonella species. Potassium phosphate buffers the medium to maintain the constant pH. Sodium chloride maintains the osmotic balance.

INSTRUCTION FOR USE

- Dissolve 33.37 grams in 1000 ml distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense as desired into tubes and sterilize by autoclaving at 10 psi pressure (115°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

: Light yellow to light blue homogeneous free flowing powder. Appearance of Powder

Appearance of prepared medium : Bluish green coloured, clear to slightly opalescent solution with slight

precipitate.

pH (at 25°C) : 5.5 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation. After incubation, subculture on selective agar media like MacConkey Agar or XLD Agar and incubate at 35-37°Cfor 18-24 hours.













Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	None-poor	0-10%	Pink-red	42-43°C	18-24 Hours
Salmonella Enteritidis	13076	50-100	Good- luxuriant	>=50%	Colourless	42-43°C	18-24 Hours
Salmonella Typhi	6539	50-100	Good- luxuriant	>=50%	Colourless	42-43°C	18-24 Hours
Salmonella Typhimurium	14028	50-100	Good- luxuriant	>=50%	Colourless	42-43°C	18-24 Hours

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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.

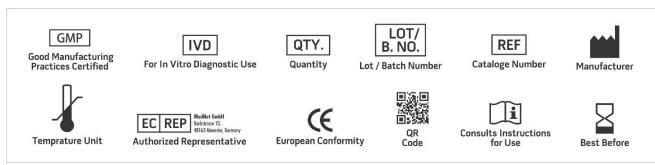
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

- 1. Van Schothorst, M., Renauld, A. and VanBeek, C 1987. Food Microbiol, 4.
- 2. FDA, U.S. 1998. Bacteriological Analytical Manual. 8 ed. Gaithersburg, MD: AOAC International.
- 3. Tindall, B. J., Crimont, P. A. D., Gorrity, G. M. and Euzesy, B. P 2005. Int. J. Sys. Evol. Microbiol., 55.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019























