Modified semi-solid Rappaport-Vassiliadis (MSRV) agar Base

Product No.	Product Category	Specification
HCM145	Dehydrated Culture Medium	500g/bottle

Intended Use

For the isolation of Salmonella in food and other samples.

Principle and Interpretation

Enzymatic digest of soya and acid hydrolysate of casein provide carbon and nitrogen sources for the target strains; sodium chloride can maintain the osmotic pressure balance of the culture medium; magnesium chloride can increase the osmotic pressure of the culture medium; potassium dihydrogen phosphate functions as a buffer; the combined action of low pH, malachite green oxalate, and sodium novobiocin can inhibit the growth of strains other than Salmonella; agar serves as a solidifying agent.

Formulation

Ingredients	/liter
Enzymatic digest of soya	4.6g
Acid hydrolysate of casein	4.6g
Sodium chloride	7.34g
Potassium dihydrogen phosphate	1.5g
Magnesium choride	10.9g
Malachite green oxalate	0.037g
Agar	2.5g
pH5.2±0.2 at 25°C	

Preparation

Weigh 32.0 g of the dry powder of the culture medium, add 1 L of distilled water or deionized water, stir and heat to boil until it is completely dissolved. When the culture medium cools down to 50℃, add 1 vial of the accessory reagent (SR0530, containing 2 mg of novobiocin) per 100 mL, mix well, prepare the plates, and set aside for later use.

Quality Control

Cultural characteristics observed after incubation at 42±0.5°C for 18-24 hours

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Quality control strains	Approx. Inoculum(CFU)	Expected Results	
		Growth	Motility
Salmonella typhimurium ATCC14028	> 10^4	Turbid growth	Good Migration
Salmonella enteritidis CMCC(B)50335	> 10^4	Turbid growth	Good Migration
Pseudomonas aeruginosa ATCC27853	> 10^4	Complete inhibition	N/A
Citrobacter freundii ATCC43864	> 10^4	Complete inhibition	N/A

Storage and Shelf Life

2-30℃，Keep container tightly closed, avoid direct sunlight.

Use before expiry date on the label.

Precautions

1. When weighing the dehydrated medium, please wear masks to avoid causing respiratory system discomfort
2. Keep container tightly closed after using to prevent clumping.

Waste Disposal

Microbiological contamination was disposed by autoclaving at 121°C for 30 minutes.

Revision

On June 14, 2024

References

ISO 6579-1:2017 Microbiology of the food chain – Horizontal method for the detection, enumeration and serotyping of Salmonella.

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