

IVD in vitro diagnosticum - For professional use only



Salmonella Enrichment Broth acc. to RAPPAPORT

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Cat. No. 1.10236.0500
(500 g)

Medium proposed by RAPPAPORT et al. (1956, 1959) for the selective enrichment of *Salmonella* (with the exception of *S. typhosa*) from fecal specimens, foodstuffs and other materials.

This broth is superior to other enrichments used for *Salmonella* - the yields obtained are several 10-fold higher (TRICHOPOULOS et al. 1972, IVESON et al. 1964). Yields are further increased by adding tetrathionate and substituting metachrome yellow with malachite green (HOFER 1969). GOOSENS et al. (1984) reported high isolation rates for salmonellae, when using a semi-solid culture medium based on RAPPAPORT Broth.

See also General Instruction of Use

Warnings and precautions see www.merck-chemicals.com

Principle

Microbiological method

Mode of Action

Malachite green and magnesium chloride largely inhibit the growth of the microorganisms normally found in the intestine, but do not affect the proliferation of most salmonellae. Only *S. typhosa* and *Shigellae* are usually inhibited by malachite green. This culture medium is thus not suitable for the enrichment of these pathogenic organisms.

Typical Composition (g/litre)

Peptone from casein 5.0; sodium chloride 8.0; di-potassium hydrogen phosphate 0.8; magnesium chloride anhydrous 18.7; malachite green 0.12.

Preparation and Storage

Cat. No. 1.10236. Salmonella Enrichment Broth acc. to RAPPAPORT (500 g)

Usable up to the expiry date when stored dry and tightly closed at +15 to +25°C. Protect from light.

After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed at +15 to +25°C.

Suspend 32.7 g/litre, dispense into test tubes, autoclave gently (20 min at 115 °C).

pH: 6.0 ± 0.2 at 25 °C.

The prepared broth is clear and dark-blue.

■ If the reconstituted medium is stored for a long period (about 2-3 weeks) a precipitate may occur, but this does not affect any of its properties.

Specimen

e.g. Stool.

Clinical specimen collection, handling and processing, see general instructions of use.

Experimental Procedure and Evaluation

Suspend the stool specimens in sterile physiological saline, ratio of up to 1:1000, add 3-4 drops of the suspension to a tube containing 5 ml enrichment broth. If only small quantities of salmonellae are suspected to be present, larger aliquots of the sample (1-2 g) should be added to 100 ml portions of the broth.
Incubation: 18-24 hours at 35 °C.

Streak samples from the resulting cultures onto selective culture media.

Quality control

	<i>Incolum</i>	<i>Growth after</i>
		<i>24 hours</i>
Escherichia coli ATCC 25922	approx. 99 %	≤ 10 %
Salmonella typhimurium ATCC 14028	approx. 1 %	≥ 90 %

