The medium complies with the recommendations of the APHA for the examination of foods and ISO Standard 6579 (2002 fourth edition).

This culture medium is a modification of the Salmonella Enrichment Broth acc. to RAPPAPORT (MERCK, Cat. No. 1.10236.0500) and was proposed by VASSILIADIS et al. (1976) who called it R 10 medium and later RVS Broth. It displays a higher selectivity towards Salmonella and produces better yields than other comparable media, especially after preliminary enrichment and at an incubation temperature of 43 °C (MAIJALA et al. 1981, 1984, JONAS et al. 1986 etc.). DE SMEDT et al. (1986) made a semi-solid RV medium by adding agar which they used for a faster Salmonella detection using mobility enrichment.

Mode of Action
The malachite green and magnesium chloride concentrations of the present culture medium are less than those of the Salmonella Enrichment Broth according to RAPPAPORT in order to improve the growth of Salmonella at 43 °C. Peptone from soymeal is also used for the same reason. Lowering pH to 5.2 increases selectivity. ALCAIDE et al. (1982) have reported that addition of novobiocin (40 mg/litre) enhances the inhibition of accompanying flora.

Typical Composition (g/litre)
Peptone from soymeal 4.5; magnesium chloride hexahydrate 28.6; sodium chloride 7.2; di-potassium hydrogen phosphate 0.18; potassium di-hydrogen phosphate 1.26; malachite-green 0.036.

Preparation
Suspend 41.8 g/litre, heat gently, if necessary dispense into test tubes, autoclave gently (15 min at 115 °C).

pH: 5.2 ± 0.2 at 25 °C.
The broth is clear and dark-blue.
The prepared culture medium can be stored in the refrigerator for at least 7 months (VASSILIADIS et al. 1985).

Experimental Procedure and Evaluation
Inoculate the culture medium with the sample or material from a pre-enriched culture (e.g. Peptone Water Buffered) and incubate for 24 hours at 41.5 °C. Streak material from the resulting cultures onto selective culture media.

Literature
Rappaport-VASSILIADIS Broth
RVS Broth

Ordering Information

<table>
<thead>
<tr>
<th>Product</th>
<th>Merck Cat. No.</th>
<th>Pack size</th>
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<tbody>
<tr>
<td>Salmonella Enrichment Broth acc. to RAPPAPORT and VASSILIADIS (RVS Broth)</td>
<td>1.07700.0500</td>
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<td>Peptone Water (buffered)</td>
<td>1.07228.0500</td>
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<tr>
<td>Novobiocin monosodium salt</td>
<td>EMD Biosciences</td>
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<tr>
<td>Singlepath® Salmonella</td>
<td>1.04140.0001</td>
<td>25 tests</td>
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Quality control

<table>
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<tr>
<th>Test strains</th>
<th>Inoculum</th>
<th>Growth after 24 h</th>
<th>Singlepath® Salmonella</th>
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</thead>
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<tr>
<td>Escherichia coli ATCC 25922</td>
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<td>≤ 10 %</td>
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<td>Salmonella typhimurium ATCC 14028</td>
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<tr>
<td>Enterococcus faecalis ATCC 29212</td>
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<td>-</td>
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</tbody>
</table>