

Rappaport Vassiliadis Broth - Instructions for Use

Intended Use

BACGro™ Rappaport Vassiliadis (RV) Broth is a selective enrichment medium used in the isolation of *Salmonella*. BACGro™ RV Broth conforms to ISO 11133:2014 for the isolation of *Salmonella*.

Product Summary

Rappaport Vassiliadis Broth is used in the isolation of *Salmonella* from nonsterile food goods. Soy peptone provides nitrogen. Potassium phosphate acts as a buffer, providing a low pH to inhibit competitive organisms. Sodium chloride maintains osmotic pressure. Malachite green is inhibitory to other organisms other than *Salmonella*. Some serovars of *Salmonella*, including Typhi and Enteritidis, may be susceptible to malachite green; if these organisms are suspected to be present, an alternative enrichment broth should be used in parallel. All results should be subcultured to XLD to confirm growth.

Formulation (per Liter)*

Soy Peptone	4.5 g/L
Sodium Chloride	8.0 g/L
Potassium Phosphate, Monobasic	0.6 g/L
Potassium Phosphate, Dibasic	0.4 g/L
Magnesium Chloride, Anhydrous	13.58 g/L
<u>Malachite Green</u>	<u>0.036 g/L</u>
Total	27.1 g/L

*Formula may be supplemented and/or adjusted as required to meet performance criteria

Directions

1. Add 27.1 g of RV powder to 1 L of deionized water.
2. Stir to dissolve completely.
3. Autoclave at 115°C for 15 minutes
4. Cool before use.

Precautions

This product is for laboratory use only and should only be used by qualified, trained laboratory personnel. Personnel should always use proper aseptic technique and observe all biohazardous precautions. All microbiological cultures should be presumed to be infectious.

Avoid ingestion, inhalation, or contact with skin and mucous membranes. If contact occurs, flush the area with clean water.

Quality Control Specifications

Gold Standard Diagnostics tests each lot of manufactured BACGro™ culture media utilizing appropriate control organisms and specifications as documented on the Certificate of Analysis. End users should perform quality control testing in accordance with government regulatory requirements and accreditation guidelines. The following specifications are routinely used for testing:

Appearance (dehydrated): Beige to light green, free flowing, without debris.

Appearance (prepared): Blue to turquoise, clear, with no precipitate.

pH (prepared): 5.0 – 5.4 at 25°C

Organism Performance:

Strain ID	Inoculum	Incubation			Result
		Time	Temp.	Environment	Recovery on XLD / TSA
<i>Salmonella enterica</i> ser. Typhimurium (ATCC® 14028)	≤100 CFU	21 – 27 hr.	42° C	Aerobic	>10 CFU Black centers on XLD.
<i>Escherichia coli</i> (ATCC® 25922)	>10 ⁴ CFU				
<i>Pseudomonas aeruginosa</i> (ATCC® 27853)	>10 ⁴ CFU				

<i>Salmonella enterica</i> ser. Enteritidis (ATCC® 13076)	≤100 CFU				
<i>Escherichia coli</i> (ATCC® 25922)	>10 ⁴ CFU	21 – 27 hr.	42° C	Aerobic	>10 CFU Black centers on XLD.
<i>Pseudomonas aeruginosa</i> (ATCC® 27853)	>10 ⁴ CFU				
<i>Enterococcus faecalis</i> (ATCC® 29212)	>10 ⁴ CFU	21 – 27 hr.	42° C	Aerobic	≤10 CFU on TSA
<i>Escherichia coli</i> (ATCC® 25922)	>10 ⁴ CFU	21 – 27 hr.	42° C	Aerobic	≤100 CFU on TSA

Limitations of the Procedure

This product is not labeled for use as a medical device, and is not intended to diagnose, treat, or prevent disease.

Due to variation in nutritional requirements, some species or strains may be encountered that grow poorly in this medium.

Further biochemical or serological testing is required for the identification of organisms grown in this medium.

Storage and Expiration

BACGro™ RVB should be stored at 2 – 30 degrees Celsius. Because of the hygroscopic nature of dehydrated culture media, it should be stored in a dry place and the lid should remain tightly sealed. Media should be discarded if it is not free flowing or shows discoloration.

The expiration date printed on the label is applicable to media stored as directed.

Catalog Numbers

DCM5201 – Rappaport Vassiliadis Broth, 500g

Revision History:

Revision	Description	Effective Date
02	Increased the inhibitory inoculum to align with industry standards (>1,000 CFU → >10 ⁴ CFU)	23-FEB-2024
01	Document creation	24-JUN-2021