



BPL Agar

M1020

BPL Agar (Brilliant green-Phenol red-Lactose Agar) is used for selective isolation and identification of Salmonellae with the exception of *Salmonella* Typhi in faeces, urine, meat, milk and other materials.

Composition**

Ingredients	Gms / Litre
Meat peptone	7.000
Sodium chloride	5.000
Lactose	15.000
Phenol red	0.040
Brilliant green	0.005
Agar	13.000
Final pH (at 25°C)	6.5±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 40.04 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C. Mix well and pour into sterile Petri plates.

Principle And Interpretation

Brilliant green, phenol red, lactose Agar (BPL) is a selective agar medium for the identification and isolation of *Salmonella* with the exception of *Salmonella* Typhi in faeces, urine, meat, milk and other materials (1).

The medium contains meat peptone, which supplies the nitrogenous nutrients to the organisms. Lactose is the fermentable carbohydrate, which after degradation yields acid production, indicated by the phenol red indicator. In the acidic range, phenol red turns yellow while in alkaline conditions it turns red. Brilliant green inhibits gram-positive organisms and also *Salmonella* Typhi and *Shigella* species.

Quality Control

Appearance

Light yellow to pink homogeneous free flowing powder

Gelling

Firm, comparable with 1.3% Agar gel.

Colour and Clarity of prepared medium

Brownish green coloured, clear to slightly opalescent gel forms in Petri plates.

Reaction

Reaction of 4.0% w/v aqueous solution at 25°C. pH : 6.5±0.2

pH

6.30-6.70

Cultural Response

M1020: Cultural characteristics observed in a humid atmosphere after an incubation at 35-37°C for 18-24 hours.

Organism	Inoculum (CFU)	Growth	Recovery	Colour of colony
Cultural Response				
<i>Bacillus subtilis</i> ATCC 6633	50-100	none-poor	<=10%	
<i>Enterococcus faecalis</i> ATCC 29212	50-100	none-poor	<=10%	
<i>Escherichia coli</i> ATCC 25922	50-100	poor-good	30-40%	yellow

<i>Salmonella Choleraesuis</i> ATCC 12011	50-100	good-luxuriant	$\geq 50\%$	pink-red
<i>Salmonella Enteritidis</i> ATCC 50-100 13076		good-luxuriant	$\geq 50\%$	pink-red
<i>Salmonella Typhimurium</i> ATCC 14028	50-100	good-luxuriant	$\geq 50\%$	pink to red
<i>Staphylococcus aureus</i> ATCC 25923	$\geq 10^3$	inhibited	0%	

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference

1. Kauffmann F., 1935, Z. Hyg. Infekt. Kr., 117:26.

Revision : 02 / 2015



Disclaimer :

User must ensure suitability of the product(s) in their application prior to use. Products conform solely to the information contained in this and other related HiMedia™ publications. The information contained in this publication is based on our research and development work and is to the best of our knowledge true and accurate. HiMedia™ Laboratories Pvt Ltd reserves the right to make changes to specifications and information related to the products at any time. Products are not intended for human or animal or therapeutic use but for laboratory, diagnostic, research or further manufacturing use only, unless otherwise specified. Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents.