

TM 1954 – AGAR MEDIUM L (BRILLIANT GREEN, PHENOL RED, LACTOSE MONOHYDRATE, SUCROSE AGAR) (as per BP)

INTENDED USE

For selective isolation of Salmonellae other than *Salmonella* Typhi from faeces, foods, dairy products.

PRODUCT SUMMARY AND EXPLANATION

Brilliant Green, Phenol Red, Lactose Monohydrate, Sucrose Agar is used as a primary plating medium for isolation of Salmonella species was first described by Kristensen et al as medium for differentiation of paratyphoid B from other Gram negative enteric bacteria. It was further modified by Kauffmann for isolation of Salmonella from stool samples. This medium is employed in testing clinical specimens. Heavy inocula and heavily contaminated samples can be analyzed due to the outstanding selectivity of this medium. Brilliant Green Agar is used in the microbial limits test and with novobiocin for testing food samples.

COMPOSITION

Ingredients	Gms / Ltr
Pancreatic digest of Casein	10.000
Yeast extract	3.000
Lactose monohydrate	10.000
Sucrose	10.000
Sodium chloride	5.000
Phenol red	0.080
Brilliant green	0.0125
Agar	20.000

PRINCIPLE

The medium contains pancreatic digest of casein and yeast extract supplies essential amino acids and long chains of peptides for enhanced growth. Sodium chloride maintains the osmotic equilibrium. Lactose monohydrate and sucrose are the fermentable carbohydrate sources. Phenol red serves as an acid base indicator giving yellow colour to lactose and or sucrose fermenting bacteria. This medium also contains brilliant green, which inhibits growth of majority of Gram-negative and Gram-positive bacteria. Salmonella Typhi, Shigella species, Escherichia coli, Proteus species, Pseudomonas species, and Staphylococcus aureus are mostly inhibited.

INSTRUCTION FOR USE

- Dissolve 57.58 grams (the equivalent weight of dehydrated medium per litre) in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes. AVOID OVERHEATING.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Light yellow to light pink homogeneous free flowing powder
Appearance of prepared medium	: Greenish brown coloured clear to slightly opalescent gel forms in Petri plates
pH (at 25°C)	: 6.9±0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colour of colony	Incubation Temperature	Incubation Period
<i>Salmonella Typhimurium</i>	14028	50 -100	Luxuriant	>=70 %	Pinkish white	35-37°C	18-72 Hours
<i>Salmonella Enteritidis</i>	13076	50 -100	Luxuriant	>=70 %	Pinkish white	35-37°C	18-72 Hours
<i>Salmonella Typhi</i>	6539	50 -100	Fair-good	20 -40 %	Reddish pink	35-37°C	18-72 Hours
<i>Escherichia coli</i>	8739	50 -100	None to poor	0 -10 %	yellowish green	35-37°C	18-72 Hours
<i>Escherichia coli</i>	25922	50 -100	None to poor	0 -10 %	yellowish green	35-37°C	18-72 Hours
<i>Staphylococcus aureus subsp. aureus</i>	6538	>=10 ³	Inhibited	0%	-	35-37°C	18-72 Hours
<i>Staphylococcus aureus subsp. aureus</i>	25923	>=10 ³	Inhibited	0%	-	35-37°C	18-72 Hours

PACKAGING:

In pack size of 100 gm and 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.













DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Kauffman F., 1935, Seit F. Hyg. 177:26.
2. British Pharmacopoeia, 2009, The Stationery office British Pharmacopoeia.
3. Kristensen M., Lester V, and Jurgens A., 1925, Brit.J.Exp.Pathol.,6:291.



 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Buckstrasse 10 48163 Münster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
Revision: 08 Nov., 2019