Phenol Red Lactose Agar

Intended Use
Phenol Red Lactose Agar is used for studying lactose fermentation by the pure cultures of microorganisms.

Summary
Phenol Red Agar media are recommended for studying the fermentation of various carbohydrates individually by the pure cultures of microorganisms.

Principle
Proteose peptone which is free from fermentable carbohydrates is added in the medium thereby preventing the production of false positive reactions. When Phenol Red Agar with lactose is used, a positive carbohydrate fermentation reaction is indicated by the production of a yellow colour in agar due to the effect of acid production. Gas production is indicated by the splitting of agar or by the bubble's formation. Plates or tubes may be incubated aerobically or anaerobically depending on the type of the test organism.

Formula*

Ingredients	**g/L**
Proteose peptone	10.0
Beef extract	1.0
Sodium chloride	5.0
Lactose	5.0
Phenol red	0.025
Agar	15.0
Final pH (at 25°C)	7.4 ± 0.2

*Adjusted to suit performance parameters.

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Specimen Collection and Handling
For clinical samples follow appropriate techniques for handling specimens as per established guidelines.
For food and dairy samples, follow appropriate techniques for handling specimens as per established guidelines.
For water samples, follow appropriate techniques for handling specimens as per established guidelines and local standards.
Specimens should be obtained before antimicrobial agents have been administered.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 41.02 g of the powder in 1000 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely.
3. Dispense in tubes and sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Allow the tubed media to cool in slanted position to form slants with deep butts.

Quality Control
Dehydrated Appearance: Light yellow to pink coloured, homogeneous, free flowing powder.
Prepared Appearance: Red coloured, clear solution without any precipitate.
Cultural Response: Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organism (ATCC)	Growth	Acid	Gas
Alcaligenes faecalis (8750)	Good	Negative reaction, no colour change	Negative reaction
Escherichia coli (25922)	Good	Positive reaction, Yellow colour	Positive reaction
Klebsiella pneumoniae (13883)	Good	Positive reaction, yellow colour	Positive reaction
Proteus hauseri (13315)	Good	Negative reaction, No colour change	Negative reaction
Salmonella enterica subsp. *enterica* serovar *Typhimurium* (14028)	Good	Negative reaction, No colour change	Negative reaction
Shigella flexneri serotype 2b (12022)	Good	Negative reaction, No colour change	Negative reaction

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
2. Finegold and Baron, 1986, Bailey and Scotts Diagnostic Microbiology, 7th ed., The C.V. Mosby Co., St. Louis.
3. Ewing, 1986, Edwards and Ewings Identification of *Enterobacteriaceae*, 4th ed., Elsevier Science Publishing Co., Inc.,
4. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201160120100	Dehydrated Culture Media	100 g
201160120500	Dehydrated Culture Media	500 g

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.