

TM 253 – PHENOL RED LACTOSE AGAR

INTENDED USE

For determining of the ability of microorganisms to ferment lactose.

PRODUCT SUMMARY AND EXPLANATION

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

COMPOSITION

Ingredients	Gms / Ltr
Proteose peptone	10.000
Beef extract	1.000
Sodium chloride	5.000
Lactose	10.000
Phenol red	0.025
Agar	15.000

PRINCIPLE

The medium consists of 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 bubbles formation. Plates or tubes may be incubated aerobically or anaerobically depending on the type of the test organism.

INSTRUCTION FOR USE

- Dissolve 41.02 grams in 1000 ml purified/distilled water, mix well.
- Heat to boiling to dissolve the medium completely.
- Distribute in tubes and Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Allow the tubed media to cool in slanted position to form slants with deep butts.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Light yellow to pink coloured homogeneous free flowing powder.
- Appearance of prepared medium** : Red coloured clear to slightly opalescent gel forms in tubes as slants.
- pH (at 25°C)** : 7.4 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid	Gas	Incubation Temperature	Incubation Period
<i>Alcaligenes faecalis</i>	8750	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	35 - 37°C	18 - 24 Hours
<i>Escherichia coli</i>	25922	50-100	Luxuriant	Positive reaction, yellow colour	Positive reaction	35 - 37°C	18 - 24 Hours
<i>Klebsiella pneumoniae</i>	13883	50-100	Luxuriant	Positive reaction, yellow colour	Positive reaction	35 - 37°C	18 - 24 Hours
<i>Proteus vulgaris</i>	13315	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	35 - 37°C	18 - 24 Hours
<i>Salmonella Typhimurium</i>	14028	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	35 - 37°C	18 - 24 Hours
<i>Shigella flexneri</i>	12022	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	35 - 37°C	18 - 24 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. 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., New York.



 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 Baukstrasse 10, 49163 Muenster, 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