

TM 1797 – ANDRADE LACTOSE PEPTONE WATER

INTENDED USE

To study fermentation reactions of members of the *Enterobacteriaceae*.

PRODUCT SUMMARY AND EXPLANATION

Bacteria differ widely in their ability to metabolize carbohydrates and related compounds. Lactose fermentation is one of the important biochemical reaction of *Enterobacteriaceae* differentiating lactose fermentors from non-lactose fermentors. Andrade Lactose Peptone water can be used to identify *Enterobacteriaceae* on this basis for their ability to ferment lactose. If the test organism metabolizes the lactose, acids are produced thereby lowering the pH of the medium. This causes subsequent colour change of the indicator acid fuchsin, from colourless to pink to red. If the carbohydrate is not metabolized, the medium remains pale to straw coloured.

COMPOSITION

Ingredients	Gms / Ltr
Peptone special	10.000
Lactose	10.000
Sodium chloride	5.000
Acid fuchsin	0.010

PRINCIPLE

Peptone, Special serves as a source of nitrogen, amino acids, vitamins and other essential growth requirements. Lactose is a fermentable sugar. Sodium chloride maintains osmotic equilibrium while acidic fuchsin acts as pH indicator.

INSTRUCTION FOR USE

- Dissolve 25.01 grams in 1000 ml distilled water.
- Heat, if necessary, to dissolve the medium completely.
- Dispense in test tubes containing inverted Durham's tubes.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow to pink Homogeneous Free flowing powder.
Appearance of prepared medium : Pinkish orange clear solution.
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>Escherichia coli</i>	25922	50-100	Luxuriant	Positive reaction, Pink colour	Positive reaction	35-37°C	18-24 Hours



<i>Salmonella Enteritidis</i>	13076	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
<i>Klebsiella pneumoniae</i>	13883	50-100	Luxuriant	Positive reaction, Pink colour	Positive reaction	35-37°C	18-24 Hours
<i>Proteus mirabilis</i>	25933	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	35-37°C	18-24 Hours

PACKAGING:

In pack size of 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.F., 1985, Media for isolation-cultivation-identification- maintenance of Medical bacteria, Vol-I, Williams and Wilkins, Baltimore.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative MedNet GmbH Borkstrasse 10, 48163 Münster, Germany	 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**
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