CM 20,077 – ANDRADE LACTOSE PEPTONE WATER

INTENDED USE

Tostudy fermentation reactions of membersofthe Enterobacteiaceae.

PRODUCT SUMMARYANDEXPLANATION

Bacteria differwidely 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 fermenters. 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 25.01grams 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

Culturalcharacteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid	Gas	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	Positve reaction, Pink colour	Positive reaction	35-37°C	18-24 Hours

Salmonella Enteritidis	13076	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	35-37°C	18-24 Hours
Shigella flexneri	12022	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	35-37°C	18-24 Hours
Klebsiella pneumoniae	13883	50-100	Luxuriant	Positve reaction, Pink colour	Positive reaction	35-37°C	18-24 Hours
Proteus mirabilis	25933	50-100	Luxuriant	Negative reaction, no colour change	Negative reaction	35-37°C	18-24 Hours

PACKAGING:

Inpacksizeof500 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.

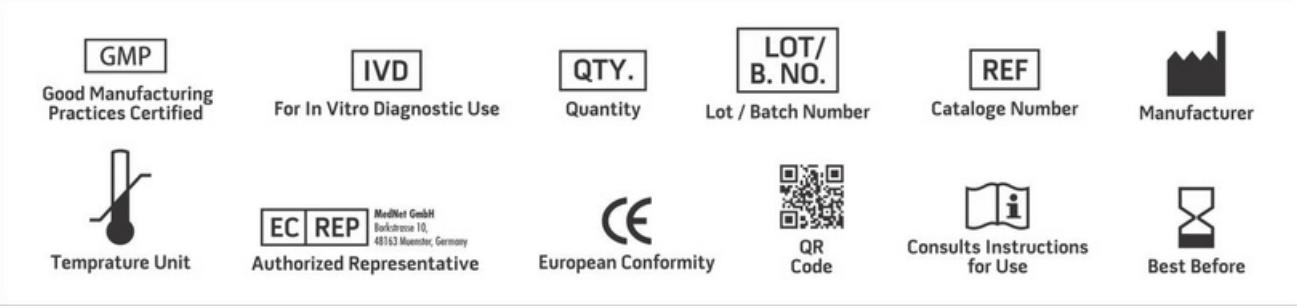
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

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



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

*For LabUse Only