

TM 1434 – PL AGAR

INTENDED USE

For isolation and cultivation of *Plesiomonas shigelloides* from food.

PRODUCT SUMMARY AND EXPLANATION

Plesiomonas shigelloides is an opportunistic pathogen while controversy exists as its role as an enteropathogen and is mainly associated with the consumption of uncooked molluscus or with foreign travel. It does not grow on media like Thiosulphate Citrate Bile Salts Sucrose Agar but grows well on PL Agar. PL Agar is formulated as per APHA for isolation and cultivation of *P. shigelloides* from foods.

COMPOSITION

Ingredients	Gms / Ltr		
Peptic digest of animal tissue	5.000		
Yeast extract	2.000		
Sodium chloride	5.000		
Mannitol	7.500		
L-Arabinose	5.000		
Inositol	1.000		
L-Lysine	2.000		
Bile salts	1.000		
Phenol red	0.080		
Agar	15.000		

PRINCIPLE

The medium consists of Peptic digest of animal tissue and yeast extract which supply the nitrogenous compounds, vitamin B complex and trace ingredients. L-lysine is the amino acid source while arabinose, inositol and mannitol are the fermentable carbohydrate sources in the medium. Bile salts inhibit gram-positive bacteria. Phenol red is the pH indicator, which turns yellow at acidic pH.

INSTRUCTION FOR USE

- Dissolve 43.58 grams in 1000 ml distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 10 psi pressure (115°C) for 15 minutes.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

: Light yellow to pink homogeneous free flowing powder. Appearance of Powder

Appearance of prepared medium : Red coloured clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C)











INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Plesiomonas shigelloides	14029	50-100	Luxuriant	>=70%	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. Ingram C. W., Morrison A. J. and Levitz R. E., 1987, J. Clin. Microbiol., 25 : 1791.
- 2. Holmberg S. D. and Farmer J. J., 1984, Rev. Infect. Dis., 6: 633.
- 3. Holmberg S. D., Wachsmith K., Hickman, Brenner F. W., Blake P. A., Farmer J. J., 1986, Ann. Intern. Med., 105: 690.
- 4. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.



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

*For Lab Use Only
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