TM 745 - INOSITOL GELATIN MEDIUM (as per APHA)

INTENDED USE

For cultivation of *Plesiomonas shigelloides* from food samples in accordance with APHA.

PRODUCT SUMMARY AND EXPLANATION

Plesiomonas shigelloides, an opportunistic pathogen is commonly implicated in human waterborne diarrhoea. It is mainly isolated from fresh water, fresh water fish, and shellfish and from many types of animals including goats, cattle, swine, dogs, cats, monkeys, vultures, snakes and toads. Human infections attributed to *P. shigelloides* are almost exclusively restricted to two clinical settings. The most common presentation is a watery diarrheal illness most often found in individuals with a history of fresh water contact, seafood consumption, exposure to amphibia or reptiles or travel to developing countries. The second well-recognized syndrome associated with *P. shigelloides* is septicemia, often accompanied by meningitis. Inositol Gelatin Medium is recommended for the cultivation of *P. shigelloides* from food as recommended by APHA.

Samples, depending upon consistency and expected numbers are diluted and directly streaked on PL Agar and Inositol Brilliant Green Bile Agar. Another 10 grams of the sample is inoculated into 90 ml of Tetrathionate Broth Base. Plates are incubated at 35-37°C and broth at 40°C. Following an incubation of 24 hours, presumptive *P. shigelloides* colonies are inoculated into TSI slants and Inositol Gelatin Medium Butts.

COMPOSITION

Ingredients	Gms / Ltr
Gelatin	120.000
Yeast extract	5.000
Disodium hydrogen phosphate	5.000
Inositol	10.000
Phenol red	0.050

PRINCIPLE

Yeast extract serves as source of B-complex nutrients. Disodium phosphate buffers the medium. *P. shigelloides* utilizes inositol for metabolic activity, producing only acid and no gas. This acid is detected by the phenol red indicator, which changes its colour from red to yellow. *P. shigelloides* also do not hydrolyze gelatin which acts as a solidifying agent.

INSTRUCTION FOR USE

- Dissolve 140.05 grams in 1000 ml warm distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense in tubes.
- Sterilize by autoclaving at 115°C (10 psi pressure) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

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

INTERPRETATION

Cultural characteristics observed after an incubation.

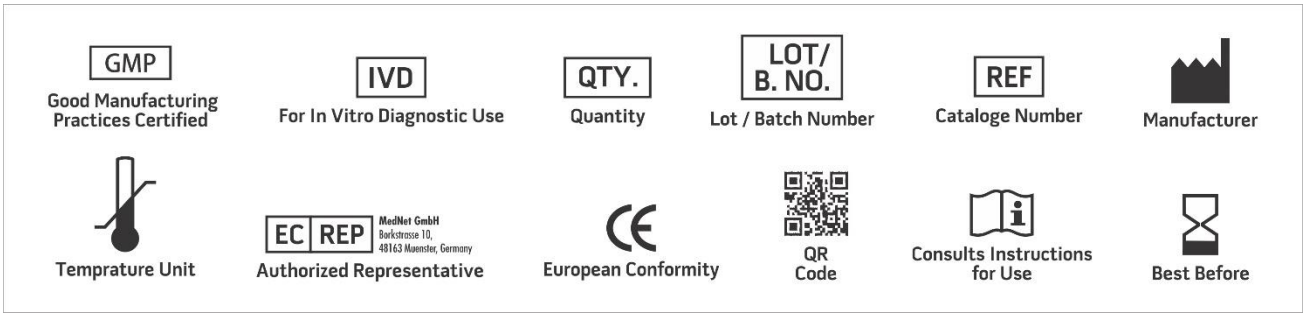
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Plesiomonas shigelloides	14029	50-100	Luxuriant	35-37°C	18-24 Hours

PACKAGING:
In pack size of 500 gm bottles.

STORAGE
Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°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. Brenden R. A., Miller M. A., and J. M., Janda, 1988, Rev. Infect. Dis. 10:303-316
2. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Eds.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.
3. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.
4. Miller M. L and Koburger J. A., 1985, J. Food Prot., 48:449.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.
***For Lab Use Only**
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