TITAN MEDIA

CETRIMIDE BROTH TM 422

For selective enrichment of *Pseudomonas aeruginosa*

Composition

Ingredients	Gms/ltr.
Peptic digest of animal tissue	10.00
Beef extract	10.00
Sodium chloride	5.00
Cetrimide	0.30

* Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight.

Instructions for Use

Dissolve 25.30gms in 1000ml distilled water. Gently heat to boiling with gentle swirling and dissolve the medium completely. Sterilize by autoclaving at 15 psi (121°C) for 15 minutes. Cool to 45-50°C and dispense as desired.

Appearance: Light amber coloured, clear to slightly opalescent solution
pH (at 25°C): 7.2 ± 0.2

Principle

CETRIMIDE BROTH is used for the selective enrichment of *Pseudomonas aeruginosa*. The presence of Cetrimide in medium has a property to inhibit other bacteria except *P. aeruginosa*. It also acts as a quaternary ammonium, cationic detergent which causes release of nitrogen and phosphorus from bacterial cells other than *P. aeruginosa*. Peptic digest of animal tissue and Beef extract provide organic nitrogen to the organisms. Sodium chloride maintains osmotic balance in the medium. Cetrimide acts as a quaternary ammonium, cationic detergent that causes release of nitrogen and phosphorus from bacterial cells other than *Pseudomonas aeruginosa*. On incubation period of 48 hours of *P. aeruginosa* showed profuse growth whereas *E.coli* and *S. aureus* inhibits the growth in this medium.

Interpretation

Cultural characteristics observed after inoculating (10^2-10^3CFU/ml), on incubation at 35-37°C for 24 - 48 hours.

Microorganisms	ATCC	Inoculum (CFU/ml)	Growth
Pseudomonas aeruginosa	27853	10^2-10^3	Luxuriant
Escherichia coli	25922	10^2-10^3	Inhibited
Staphylococcus aureus	25923	10^2-10^3	Inhibited

References

1. King, E.O., et al., J. Lab. Clin. Med. 44. 2, 301. (1954).
2. United States Pharmacopeia,. United States Pharmacopeial Convention, nc. Rockville, Maryland (1990)