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TECHNICAL PRODUCT INFORMATION

CETRIMIDE AGAR - Catalog No. P1130-20 mL, P1131-25 mL & P6010-10 mL
CETRIMIDE AGAR SLANT - Catalog No. T1210-Slant
CETRIMIDE/MANITOL SALT BI-PLATE - Catalog No. P3130

INTENDED USE:
Cetrimide Agar is designed for selective isolation and identification of *Pseudomonas aeruginosa*.

HISTORY/SUMMARY:
King et al developed Medium A for the enhancement of pyocyanin production of *Pseudomonas*[1].
In 1951, Lawbury[3] described the use of cetrimide in a 0.1% concentration for clinical application.

In 1955, Sawbury and Collins[4] reported a reduction of the concentration of cetrimide required for selectivity, due to the increased purity of the inhibitory agent. The introduction of "Cetavlon" (cetrimide) stimulated a new study to determine the minimum concentration of cetrimide required for isolation of P. aeruginosa for mixed clinical flora. The new experiments demonstrated that a concentration of 0.03% using the much improved Cetavlon was sufficient for selectivity.

Brown and Sawbury[5] introduced the use of a new improved cetrimide agar in 1965. By combining the Medium A of King, Ward and Raney[6] with the .03% cetrimide concentration previously introduced, they developed a medium that would support the growth of most desired organisms.

PRINCIPLES:
Gelatin peptone supplies the nutrients necessary to support growth. Cetrimide is a quaternary ammonium, cationic detergent compound, which is inhibitory to a wide variety of bacterial species including *Pseudomas* species other than *P. aeruginosa*. Cetrimide Agar Base is supplemented with 1% glycerol as a source of carbon.

FORMULA:

Component (per liter of purified water)	Amount
Pancreatic Digest of Gelatin	20.0 g
Potassium Sulfate	10.0 g
Magnesium Chloride	1.4 g
Cetyltrimethylammonium bromide	0.3 g
Agar	13.6 g
Glycerol	10.0 mL

Final pH: 7.2 ± 0.2 @ 25□C

STORAGE:
This medium should be stored at 2-8°C. Media should not be used beyond expiration date. Media should not be used if showing signs of deterioration.

PROCEDURE:
Specimens are inoculated according to the source of the specimen. In most cases parallel inoculation of some non-inhibitory medium is utilized to ensure recovery of the test organism.

When possible, clinical specimens should be inoculated directly to suitable media. Swabs are rolled on the surface of the warm Cetrimide Selective Agar Plate. The swab is then placed in a tube of appropriate non-inhibitory medium.

Starting from the inoculated area on plate, one half of the plate is streaked using some method of cross-hatching to assure good isolation. Several stabs may be made into the agar when desirable.

INCUBATION:
Incubate plates and agar slants at 33-37°C and observe for growth at 18-48 hours.

TEST CHARACTERISTICS

Organisms Characteristics	Growth Characteristics	Differential
Pseudomonas aeruginosa	Adequate growth	Green Pigment
Pseudomonas putide	Adequate growth	
Pseudomonas maltophilia	Inhibited	
Escherichia coli	Inhibited	
Enterobacter cloacae	Inhibited	
Staphylococcus aureus	Inhibited	

REFERENCES:

1. King, Ward, and Raney. 1954. J. Lab. Clin. Med. 44:301.
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3. Journal of Clinical Pathology, 4:66, 1951.
4. Journal of Clinical Pathology, 8:47, 1955.
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6. Journal of Laboratory Clinical Medicine, 44:301. 1954.
7. Ann. New York Academy of Science, 46:479, 1946.
8. USPHA, CDC, Monograph, 1972.