Cetrimide agar

REF.	Pack size
1403 001	100 gm
1403 002	500 gm

Intended Use

Cetrimide Agar is used in the isolation and identification of Pseudomonas aeruginosa from clinical specimens such as pus , sputum and others.

Background

Pseudomonas aeruginosa produces a number of water-soluble pigments, including the yellow-green or yellow-brown fluorescent pigment pyoverdin (fluorescein). When pyoverdin combines with the blue watersoluble pigment pyocyanin, the bright green color characteristic of Pseudomonas aeruginosa is created. Agar containing Cetrimide has been used successfully to isolate Pseudomononas aeruginosa from contaminated specimens.

Principle

Pancreatic Digest of Gelatin provides the nitrogen, vitamins, and carbon in Cetrimide Agar. Magnesium Chloride and Potassium Sulfate enhance the production of pyocyanin and fluorescein.Cetrimide (cetyltrimethylammonium bromide) is the selective agent. Cetrimide acts as a quaternary ammonium cationic detergent causing nitrogen and phosphorous to be released from bacterial cells other than Pseudomonas aeruginosa.

Components gm/Liter

Pancreatic digest of gelatin	20.0
Cetrimide	0.3
Magnesium chloride	1.4
Dipotassium sulphate	10.0
Agar	13.6

Final pH (at 25°C) 7.2 ± 0.2

Preparation, Storage and Stability

Store the dehydrated medium at 10-30°C and use before the expiry date on the label.Store the prepared medium at 2-8°C
After the desired amount of medium is taken out, replace the cap tightly to protect from hydration.

Procedure

1. Suspend 45.3 g of the powder in 1 L distilled water containing 10 ml glycerol and mix well.
2. Boil with frequent agitation to dissolve the powder completely.
3.Sterilize by autoclaving at 121°C for 15 minutes.

SYMBOLS IN PRODUCT LABELLING

EC REP	Authorised Representative		Temperature Limitation
IVD	For in-vitro diagnostic use		Use by/Expiration Date
LOT	Batch Code/Lot number		CAUTION. Consult instructions for use
REF	Catalogue Number		
	Consult instructions for use		Manufactured by

Quality Control

Appearance

1- Dehydrated Appearance : light yellow coloured, homogeneous, free flowing powder.

2- Prepared Appearance : Prepared medium is light to moderately hazy and grey-white with precipitate.

3- Cultural Response : Cultural characteristics after 24-48 hours at 30-35°C (As per pharmacopeia or 35± 2°C for clinical specimens

Organisms (ATCC)	Growth	Colour of the Colony
Escherichia coli	inhibited	-
Pseudomonas aeruginosa	Good	green-yellow to blue-green
Staphylococcus aureus	inhibited	-

Interpretation of the results

Examine plates or tubes for the presence of characteristic blue, blue-green, or yellow-green pigment.Pseudomonas aeruginosa typically produces both pyocyanin and fluorescein.

Precautions

1. Occasionally some enterics will exhibit a slight yellowing of the medium; however, this coloration is easily distinguished from fluorescein production because this yellowing does not fluoresce.

2. Some nonfermenters and some aerobic spores formers may exhibit a water-soluble tan to brown pigmentation on this medium. Serratia strains may exhibit a pink pigmentation.

Bibliography

1. King, E. O., M. K. Ward, and E. E. Raney. 1954. Two simple media for the demonstration of pyocyanin and fluorescein. J. Lab.
Clin. Med. 44:301.
2. Association of Official Analytical Chemists. 1995. Bacteriological analytical manual, 8
th ed. AOAC International, Gaithersburg, MD.
3. United States Pharmacopeial Convention. 1995. The United States pharmacopeia, 23rd ed. The United States Pharmacopeial
Convention, Rockville, MD.

Spectrum For Diagnostic Industries - Free Zone
Ismailia Free Zone Industrial Area, Block 5 .
Cairo- Port said Avenue.
Ismailia,Egypt
Tel: +2 064 3488 013 - +2 064 3488 014 Fax: +2 064 3488 015
www.sdi-fz.com

EC REP MDSS GmbH
Schiffgraben 41
30175 Hannover, Germany

CE

ISO 13485:2016