HiCrome[™] Acinetobacter Agar Base

Recommended for selective isolation of Acinetobacter species from environmental and clinical samples.



Single Streak Rapid Differentiation Series

Composition **

Ingredients	Grams/Litre
Peptone special	9.00
Sodium chloride	5.00
Selective mix	0.50
Chromogenic mixture	1.35
Agar	15.00

Final pH (at 25°C) 7.0 ± 0.2

** Formula adjusted, standardized to suit performance parameters

Directions

Suspend 30.85 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 45-50°C and add the rehydrated contents of two vials of MDR Selective Supplement (FD271) or two vials of Leeds Acinetobacter Selective Supplement (FD335). Mix well and pour into sterile Petri plates.

Principle and Interpretation

Acinetobacter species are gram negative ubiquitous bacteria that have been isolated from patients with nosocomial infection, environment, soil, and water. Acinetobacter is mostly found in every type of infections (3). There is an alarming situation as Acinetobacter baumannii is found to be resistant to most commonly used antibiotics which includes betalactams and aminoglycosides (2,3). Immunocompromised patients requiring mechanical respirations are at more risk of infection by Acinetobacter species.(1)

Peptone special provides nitrogeneous and carbonaceous compounds, long chain amino acids and vitamins to the organisms. Sodium chloride maintains the osmotic balance. Selective mix inhibits gram positive organisms. The chromogenic mixture in the medium allows the differentiation of Acinetobacter species from other organisms.

Type of specimen

Clinical Samples, environment

Specimen Collection and Handling

For clinical samples, follow appropriate techniques for sample collection, processing as per guidelines and local standards (4, 5). After use, contaminated materials must be sterilized by autoclaving before discarding.

Warning and Precautions

In Vitro diagnostic use only. Read the label before opening the container. Wear protective gloves/protective clothing/eye protection/face protection. Follow good microbiological lab practices while handling specimens and culture. Standard precautions as per established guidelines should be followed while handling specimens. Safety guidelines may be referred in individual safety data sheets

Limitations

- 1. Due to variable nutritional requirements, some strains may show poor growth on this medium.
- 2. Slight colour variation may be observed depending upon the utilization of the substrate by the organism.

Performance and Evaluation

Performance of the medium is expected when used as per the direction on the label within the recommended temperature.



M1938 HiCrome™ Acinetobacter Agar Base



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Quality Control

Appearance of Powder : Gelling : Colour and Clarity : of prepared medium Reaction : Cultural Response :	Light yellow to yellow homogeneous free flowing powder. Firm, comparable with 1.5% Agar gel. Yellow coloured, clear to slightly opalescent gel forms in Petri plates. Reaction of 3.09% w/v aqueous solution at 25°C. pH:7.0 ± 0.2. Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours.			
Organism (ATCC)	Inoculum (CFU)	Growth	Recovery with FD271	Colour of colony
Acinetobacter baumannii (BAA-1605)	50-100	luxuriant	≥50%	Light purple with halo
Acinetobacter baumannii (BAA-747)	≥10 ³	inhibited	0%	-
Acinetobacter baumannii (19606)	≥10 ³	inhibited	0%	-
Acinetobacter lwofii (15309)	≥10 ³	inhibited	0%	-
Acinetobacter haemolyticus (19002)	≥10 ³	inhibited	0%	-
Escherichia coli (25922) (00013*)	≥10 ³	inhibited	0%	-
Enterococcus faecalis (29212) (00087*)	≥10 ³	inhibited	0%	-

Key : * : Corresponds to WDCM number

Storage and Shelf-life

Store between 2-8°C in a tightly closed container and the prepared medium at 2-8°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle inorder to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Use before expiry date on the label.

Product performance is best if used within stated expiry period.

Disposal

User must ensure safe disposal by autoclaving and/or incineration of used or unusable preparations of this product. Follow established laboratory procedures in disposing of infectious materials and material that comes into contact with clinical sample must be decontaminated and disposed of in accordance with current laboratory techniques (4, 5).

References

- Bergogne- Berezin, E., m. L. Joly-Guillou, and J.F. Vieu. 1987. Epidemiology of nosocomial infections due to Acinetobacter calcoaceticus. J. Hosp. Infect. 10:105-113
- Montefour, K., et.al.2008. Acinetobacter baumanni : An EmergingMultidrug Resistant pathogen in critical care Nurse; 28:15-25
- Valentine, S.C., et.al. 2008 Phenotypic and molecular characterization of Acinetobacter baumanni. Clinical isolates from nosocomial outbreaks in Los Angeles Country, California. J.Clin. Microbiology.; 46:2499-2507
- 4. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
- Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1

Ready Prepared Media						
Code	Product Name	Usage	Packing			
Category : 90 mm Ready Prepared Petri Plates						
MP1938	HiCrome™ MDR Acinetobacter Agar Plate	for selective isolation of <i>Acinetobacter</i> species from enviromental and clinical samples.	50 plts			



