

PRODUCT INFORMATION

Product Type: PD210 - PETRI DISHES 90mm

LD500 – Little Dishes - 50mm Petri dishes

Cat No. PD210 / LD500 - CETRIMIDE AGAR (CTA)

Intended Use:

Pseudomonas Cetrimide Agar is used for the selective isolation and identification of *Pseudomonas aeruginosa*.

Principle and Uses:

Cetrimide (cetyl trimethyl ammonium bromide) is a quarternary ammonium compound with bactericidal activity against a broad range of Gram-positive organisms and some Gram-negative organisms including certain other Pseudomonas species and related organisms.

Peptone serves as a source of nitrogen, and glycerol is used as a carbon and energy source. The production of pyocyanin is stimulated by the magnesium chloride and potassium sulfate in the medium.

Pseudomonas aeruginosa produces a number of water-soluble iron chelators, including the yellow-green or yellow-brown fluorescent pyoverdin. When pyoverdin combines with the blue water-soluble pyocyanin, the bright green colour characteristic of *Pseudomonas aeruginosa* is created. The addition of magnesium chloride and potassium sulphate enhances the production of these chelators.

Cetrimide Agar is recommended in the United States Pharmacopoeia XXVI (USP 26) and European Pharmacopoeia IV for use in Microbial Limit Tests (MLV).

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Interpretation of Results

Visual examination of colonies reveals the typical yellow-green to blue color which indicates the production of pyocyanin. Both pyocyanin and fluorescein are typically produced by strains of *P. aeruginosa*.

Product Limitations

Some non-fermenters and some aerobic spore's formers may exhibit a water-soluble tan to brown pigmentation on this medium. Further tests are necessary for confirmation of *P. aeruginosa*.

PHI-MI-303-02

Composition

Gelatin peptone - 20.0 g/L Magnesium Chloride - 1.4 g/L Potassium Sulphate - 10.0 g/L

Cetrimide - 0.3 g/L Agar - 13.6 g/L Glycerol - 10 ml/L

Storage: 2-8°C

Appearance: Light yellowish, slightly opalescent

pH Range: 7.0 - 7.4

Package contents: 10 plates in a package **Exp. Date:** Printed on label and on the item.

Required materials not supplied: Laboratory equipment as required.

Warning and Precautions - For professional use only. Follow good microbiological lab practices while handling specimens and culture. Do not use Petri dishes if they show evidence of microbial contamination, discoloration, drying, cracking, or other signs of deterioration. Avoid freezing and overheating. The Petri Dishes may be used / inoculated up to the expiration date and incubated for the recommended incubation times. After use and prior to discarding, specimen containers and all contaminated material, including the used culture media and contaminated culture containers, must be sterilized or incinerated by validated procedures. Since the nutritional requirements of organisms vary, some strains may be encountered that fail to grow or grow poorly on this medium.

If excessive moisture is observed, invert the bottom over an off-set lid and allow to air dry in order to prevent formation of a seal between the top and bottom of the plate during incubation. Storage Instructions: On receipt, store plates in the dark at 2–8 °C. Avoid freezing and overheating. Do not open until ready to use.

Waste Disposal

After interpretation all plates should be destroyed by standard incineration methods.

Performance Testing Results GPT: inoculum 10-100 cfu

Inhibitory properties: inoculum 1000 cfu

Test	ATCC	Incubation Temp. (°C)	Incubation Cond	Reaction 1	
Pseudomonas paraeruginosa	9027	30-35 °C	Aerobic, 18 hours	Pass	Yellow-green to blue pigmen
Escherichia coli	8739	30-35 °C	Aerobic, at least 72 hours	Inhibited	
Staphylococcus aureus*	6538	30-35 °C	Aerobic, at least 72 hours	Inhibited	

Implementation Date: 15/09/25

Version Number: 02

^{*} LD500