



Cetrimide Agar Base | AS-1171

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

Cetrimide agar is a selective culture medium used to isolate and presume the identity of *Pseudomonas aeruginosa*. This medium helps *P. aeruginosa* recover by preventing the majority of contaminated microbiota from growing.

A quaternary ammonium chemical called cetrimide is added, which causes bacterial cell membranes to disrupt and has a selectively inhibiting effect. Essential nutrients, including gelatin peptone, facilitate the growth of bacteria, and sodium chloride preserves the osmotic balance. Pyocyanin, a distinctive blue pigment made by *P. aeruginosa*, is enhanced by the addition of magnesium chloride and potassium sulfate. The production of this pigment facilitates the organism's presumed identification. In clinical, environmental, and industrial microbiology, cetrimide agar is frequently used to identify and count *P. aeruginosa*.

Composition (gr/L)

Pancreatic Digest of Gelatin	20
Magnesium Chloride	1.4
Potassium Sulfate	10
Cetrimide	0.3
Agar	13
Final pH at 25°C	7.2 ± 0.2

Preparation

Dissolve 44.7 g of the powder into 1 liter distilled water containing 10 ml of glycerol. Mix well. Autoclave at 121 °C for 15 minutes.

Quality Control

Dehydrated Appearance: Beige, free-flowing, homogeneous.

Prepared Appearance: Light amber, opalescent, with precipitate.

Reaction of 4.47% Solution at 25°C: pH 7.2 ± 0.2

Microbial Test Results

Incubate at 35 ± 2°C for 24 to 72 hours. Incubate *P. aeruginosa* ATCC 9027 and ATCC 27853 at 30 to 35°C for 48 to 72 hours.

Organism (ATCC)	Recovery	Yellow-Green Pigment
<i>Pseudomonas aeruginosa</i> (27853)	Good	Yellow-green
<i>Pseudomonas aeruginosa</i> (9027)	Good	Yellow-green
<i>Staphylococcus aureus</i> (25923)	Inhibition	-
<i>Escherichia coli</i> (25922)	Inhibition	-
<i>Escherichia coli</i> (8739)	Inhibition	-

Storage

Keep the container at 15-30 °C and prepared medium at 2-8 °C.