

PRODUCT CODE: 413752

Pseudomonas CN Agar Base (EN ISO 16266)(Dehydrated Culture Media) for microbiology

Preparation

Suspend 50.6 grams of the medium in one liter of distilled water. Add 10 ml of Glycerol. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution.

Sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C, mix well and dispense into plates to obtain an agar layer of at least 5 mm thick. Do not remelt the medium.

The prepared medium should be stored at 8-15°C. The color is amber, slightly opalescent. The dehydrated medium should be homogeneous, free-flowing and beige in color.

If there are any physical changes, discard the medium.

Uses

PSEUDOMONAS CN AGAR BASE is used for the identification of *Pseudomonas aeruginosa* by membrane filtration technique based on pyocyanin production.

It is a modification of *Pseudomonas* P Agar (King A Medium). This medium is recommended by UNE-EN 12780 and EN ISO 16266.

Peptone and Casein provide nitrogen, vitamins, minerals and amino acids essential for growth. Cetrimide is added as a selective agent, and Nalidixic acid to suppress contaminants of cetrimide media such as *Klebsiella*, *Proteus* and *Providencia spp.*

Potassium sulfate and Magnesium chloride provide cations to activate pyocyanin production and enhance pigment production. Bacteriological agar is the solidifying base. The membrane is placed on dishes containing the medium and it is incubated at $36 \pm 2^\circ\text{C}$ for 40 - 48 hours in containers that prevent moisture loss. The colonies are examined to verify their growth after 20 - 24 and 40 - 48 hours.

The colonies that produce a green-blue color and fluoresce under UV light are considered presumptive *Pseudomonas aeruginosa*. Presumptive colonies must be confirmed with the biochemical tests.

Composition

See in Data Sheet (TDS).

Microbiological Test

The following results were obtained from type cultures, with the glycerol added, in the performance of the medium after incubation at a temperature of $36 \pm 2^\circ\text{C}$ during 44 ± 4 hours.

Microorganism	Growth	Inoculum (CFU)	Productivity Quantitative	Selectivity Qualitative
<i>Pseudomonas aeruginosa</i> ATCC 9027	Good	10^2	Blue-green colonies with fluorescence under UV light (360 ± 20 nm)	-
<i>Pseudomonas aeruginosa</i> ATCC 27853	Good	10^2	Blue-green colonies with fluorescence under UV light (360 ± 20 nm)	-
<i>Escherichia coli</i> ATCC 25922	Inhibited	$10^4/10^6$	-	Total inhibition
<i>Enterococcus faecalis</i> ATCC 19433	Inhibited	$10^4/10^6$	-	Total inhibition

Storage

Once opened keep powdered medium closed to avoid hydration.

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