PSEUDOMONAS CHROMOGENIC AGAR

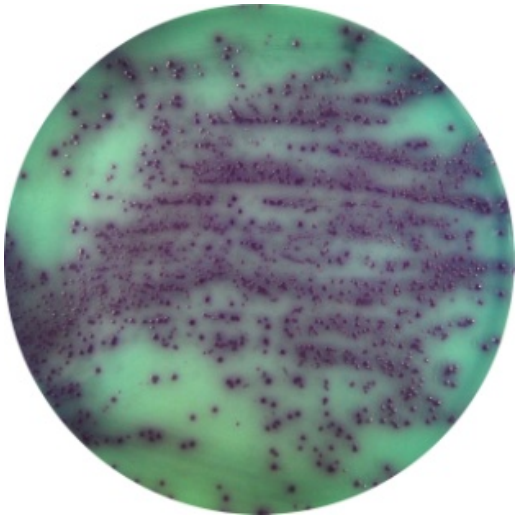
CAT Nº: 1493

For isolation of *Pseudomonas*

FORMULA IN g/l

Growth Factors	14.00	Bromothymol Blue	0.02
Peptone Mixture	10.00	Bacteriological Agar	12.00
Chromogenic Substrate	1.00		

Final pH 7.2 ± 0.2 at 25°C



Pseudomonas aeruginosa
ATCC 27853

PREPARATION

Suspend 37 grams of the medium in one liter of distilled water previously heated to 80ºC. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. AVOID OVERHEATING. DO NOT AUTOCLAVE. The prepared medium should be stored at 2-8°C and in a dark place. The color of the prepared medium is light green.

The dehydrated medium should be homogeneous, free-flowing and beige in color. If there are any physical changes, discard the medium.

USES

PSEUDOMONAS CHROMOGENIC AGAR is useful for the presumptive identification of *Pseudomonas.*

Peptone mixture provides nitrogen, vitamins, minerals and amino acids essential for growth. Growth factors allow a better growth of *Pseudomonas.* Chromogenic substrate is added to detect *Pseudomonas* by means of a color change. Bromothymosl Blue is the pH indicator. Bacteriological Agar is the solidifying agent.

Pseudomonas aeruginosa is practically the most extended bacteria species. It can be isolated from soil and water, especially from enrichment cultures for denitrifying bacteria. It is commonly isolated from clinical specimens such as wound, burn, and urinary tract infections. It is also responsible for “blue pus”, which accounts for the origin of the synonym pyocyaneus.

Pseudomonas aeruginosa has become more and more known ~~is~~ an emerging opportunistic pathogen of clinical importance. The resulting infections can affect many body parts, but the most commonly affected is the respiratory tract, responsible for 50% of nosocomial bacterial pneumonia.

The medium can be inoculated directly wit the loop. Incubate at 35±2ºC during 24-48 hours. *Pseudomonas spp* is easily distinguishable due to the magenta colony color and the color of the medium that change from green to blue-green. The rest of bacteria are inhibited, and in case of growing, they grow as colorless colonies.

MICROBIOLOGICAL TEST

The following results were obtained from type cultures in the performance of the medium after incubation at a temperature of 35± 2°C during 24-48 hours.

Microorganisms	Growth	Colony Color
Escherichia coli ATCC 8739	Inhibited	-
Pseudomonas aeruginosa ATCC 27853	Good	Magenta
Pseudomonas aeruginosa ATCC 9027	Good	Magenta
Pseudomonas aeruginosa spp	Good	Magenta
Staphylococcus aureus ATCC 25923	Inhibited	-
Enterococcus faecalis ATCC 29212	Inhibited	-
Salmonella enteritidis ATCC 13076	Inhibited	-
Salmonella typhi ATCC 19430	Inhibited	-
Salmonella typhimurium ATCC 14028	Inhibited	-

BIBLIOGRAPHY

Bergen, G. A., & J. H. Shelhamer. 1996 Pulmonary infiltrates in the cancer patient. New approaches to an old problem. Infect. Dis. Clin. North Am. 10: 297-325.

STORAGE

Once opened keep powdered medium closed to avoid hydration.