Pseudomonas Agar Base, Granulated

GM085

Pseudomonas Agar Base, granulated with added supplements is recommended for selective isolation of *Pseudomonas* species.

Composition**

Ingredients	Gms / Litre
Casein enzymic hydrolysate	10.000
Pancreatic digest of gelatin	16.000
Potassium sulphate	10.000
Magnesium chloride, anhydrous	1.400
Agar	11.000
Final pH (at 25°C)	7.1±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 24.2 grams in 500 ml distilled water containing 5 ml glycerol. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45-50°C and aseptically add sterile rehydrated contents of either CetriNix Supplement (FD029) or CFC Supplement (FD036) as desired. Mix well and pour into sterile Petri plates.

Note : Do not keep the molten agar for longer than 4 hours.

Principle And Interpretation

Pseudomononas Agar Base is a modification of Kings A medium (1) which contains magnesium chloride and potassium sulphate to enhance pigment production. Goto and Enomoto (2) formulated CetriNix supplement for the selective isolation of *Pseudomonas aeruginosa* from clinical specimens. Lowbury and Collins (3) studied cetrimide as a selective agent. CetriNix supplement suppresses *Klebsiella* , *Proteus* and *Providencia* species.

C-F-C Supplement was formulated by Mead and Adams (4) making the medium specific for isolation of *Pseudomonas* from chilled foods and processing plants, environmental samples and water. This medium is recommended for enumeration of *Pseudomonas* species from meat and meat products.

Examine inoculated plates after 24 hours and 48 hours using both white and UV light. The presence of blue-green or brown pigmentation may be considered as presumptive evidence of *Pseudomonas aeruginosa* . *Alteromonas* species may form brown or pink colonies on the medium.

Quality Control

Appearance
Cream to yellow coloured granular medium

Gelling
Firm, comparable with 1.1% Agar gel.

Colour and Clarity of prepared medium
Yellow coloured clear to slightly opalescent gel forms in Petri plates

Reaction
Reaction of 4.84% w/v aqueous solution containing 1% v/v glycerol at 25°C. pH : 7.1±0.2

pH
6.90-7.30

Cultural Response
Cultural characteristics observed after an incubation at different temperatures for 24-48 hours.

Organism	Inoculum (CFU)	Growth (at 35-37°C with FD029)	Recovery(at 35-37°C with FD029)	Growth (at 35-37°C with FD036)	Recovery (at 35-37°C with FD036)

Cultural Response

Proteus vulgaris ATCC 13315	>=10^3	inhibited	0%	-	-
Pseudomonas aeruginosa ATCC 27853	50-100	good-luxuriant	>=50%	-	-
Pseudomonas cepacia ATCC 10661	50-100	-	-	good-luxuriant	>=50%
Staphylococcus aureus ATCC 25923	>=10^3	inhibited	0%	-	-

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference

1. King E.O., Ward M.K. and Raney D.E., 1954, J.Lab and Clin. Med., 44:301.
2. Goto S. and Entomoto S., 1970, Jap. J. Microbiol., 14:65.
3. Lowbury E.J. and Collins A.G., 1955, Clin. Path., 8:47.
4. Mead G.C. and Adams B.W., 1977, Br. Poult. Sci., 18:661.

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