17208 Pseudomonas Isolation Agar

Used as a selective and differential medium for primary isolation and identification of *Pseudomonas* from clinical and nonclinical specimens.

Composition:

Ingredients	Grams/Litre
Peptic digest of animal tissue	20.0
Magnesium chloride	1.4
Potassium sulfate	10.0
Triclosan (Irgasan)	0.025
Agar	13.6
Final pH 7.0 +/- 0.2 at 37°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Appearance: Light yellow coloured, homogeneous, free flowing powder.
Colour and Clarity: Yellow coloured, slightly opalescent gel forms in petri plates.

Directions:
Suspend 45.03 g in 1 litre distilled water containing 20 ml glycerol (49769). Boil to dissolve the medium completely. Sterilize by autoclaving at 121°C for 15 minutes.

Principle and Interpretation:
Pseudomonas Isolation Agar is modified medium based on the formulation of Medium A by King et al.. It was developed to differentiating *Pseudomonas aeruginosa* from other *Pseudomonas* based on pigment
formation.
Peptic digest of animal tissue provides nitrogenous compounds. Glycerol serves as carbohydrate source and promotes the phycocyanin (blue-green pigment) production. Magnesium is a cofactor for many metabolic reactions and together potassium sulfate stimulate phyocyanin production as well. Irgasan is an antibiotic and selective inhibits gram-positive and gram-negative bacteria other than *Pseudomonas* spp. Agar is the solidifying agent.

Cultural characteristics after 24-48 hours at 35°C.

Organisms (ATCC)	Growth	Colour of Colony
Pseudomonas aeruginosa (10145)	+++	green
Pseudomonas aeruginosa (27853)	+++	blue to blue-green
Proteus mirabilis (25933)	-	-
Escherichia coli (25922)	-	-

References:
1. Gaby and Free, J. Bacteriol. 22, 349 (1931)
2. E.O. King, M.K. Ward, D.E. Raney, Two simple media for the demonstration of pyocyanin and fluorescein. J. Lab. Clin. Med., 44, 301 (1954)
3. Furia and Schenkel. January, Soap and Chemical Specialties (1968)
4. Pezzlo, In Isenberg (ed.), Clinical microbiology procedures handbook, vol. 1. American
5. Society for Microbiology, Washington, D.C. (1992)
6. Kiska and Gilligan, In Murray, Baron, Pfaller, Tenover and Yolken (ed.), Manual of clinical microbiology, 7th ed. American Society for Microbiology, Washington, D.C. (1999)

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.