

FT-IDJ79C



King A MediumFor the identification of *Pseudomonas spp* based on fluorescein production

# **Product Description**

Name: King A Medium (Pseudomonas P Agar) USP

Catalog Number: IDJ79C, 2 x 10 plates

Formua in g/l: Gelatin Pancreatic Digest 20.00 Magnesium Chloride 1.40

Potassium Sulfate 10.00 Bacteriological Agar 13.00

Glycerol 10,00 ml

**Final pH :**  $7.1 \pm 0.2$  at 25°C

**Storage:** 2–25°C Once opened keep powdered medium closed to avoid hydration.

### **Directions for use**

#### Use

KING A MEDIUM (Pseudomonas P Agar) is prepared according to the formula described by King et al. for the detection and differentiation of *Pseudomonas aeruginosa* from other *Pseudomonas* based on pyocyanin production and fluorescein (pyoverdin) inhibition.

*Pseudomonas aeruginosa* is a free-living bacterium, present in soil and water. It has become more and more known as an emerging opportunistic pathogen of clinical importance. Various different epidemiological studies track its occurrence as a nosocomial pathogen and claim that antibiotic resistance is increasing in clinical isolates.

This medium contains Gelatin pancreatic digest as a rich nitrogen source, and other nutrients for growth as vitamins, minerals and amino acids. Gelatin peptone is low in phosphorous to reduce the inhibitory action on pyocyanin production. Potassium sulfate and Magnesium chloride provide cations to activate pyocyanin production and enhance pigment production. Glycerol is a carbon source. Bacteriological agar is the solidifying agent.

Inoculate sample onto the surface of the medium, streak for isolation with an inoculating loop Incubate at  $37 \pm 1$  °C for 18 - 24 hours.

This medium promotes the production of pyocyanin, a blue-green pigment which oxidizes to brown, is water-soluble and, unlike fluorescein, is soluble in chloroform. The pigment diffuses throughout the medium and the blue color is observed. Confirmation of pyocyanin production is by chloroform extraction. Add 2 ml of chloroform to a tube of medium and shake gently to remove pigment.



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## **Microbiological Test**

The following results were obtained in the performance of the medium from type cultures, with glycerol added, after incubation at a temperature of  $35 \pm 2$  °C and observed after 18 - 24 hours.

Microorganisms	Growth	<b>Pyocyanin</b>
Pseudomonas aeruginosa WDCM 00025/ATCC 27853	Good	(+)
Pseudomonas aeruginosa WDCM 00026/ATCC 9027	Good	(+)
Escherichia coli WDCM 00013ATCC 25922	Good	(+)

### References

- King E.O. Ward M.K. Raney D.E.-J. Lab. and Clin Med, 1954. 44. 301-307

Bacteriological Analytical Manual, 8th edition. 1995. AOAC International, Gaithersburg, MD.

The United States Pharmacopoeia. 1995. The United States Pharmacopoeia, 23rd ed. United States Pharmacopoeial Convention, Rockville, MD

# **Ordering information**

Catalog size quantities and prices may be found at <a href="http://www.interchim.com">http://www.interchim.com</a>. Please inquire for higher quantities (availability, shipment conditions).

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