

King's B Medium

Catalog : HB8484-8-250

King's B Medium is used for producing fluorescent pigment test of *Pseudomonas aeruginosa*.

Approximate Formula:

Ingredients	gm/liter
Proteose Peptone No.3	20.0
Magnesium Sulfate	1.5
Dipotassium Hydrogen Phosphate	1.5
Agar	15.0
Final pH 7.2±0.2 at 25 °C	

*Adjusted and/or supplemented as required to meet performance criteria.

Directions:

Suspend 38.0g of the medium in 990ml of deionized or distilled water and add 10ml of glycerol. Mix well and heat with frequent agitation to dissolve agar. Dispense into tubes. Sterilize in an autoclave at 121 °C (15 lbs) for 15 minutes.

Principle and Interpretation:

King's B Medium can enhance the elaboration of fluorescein and inhibit the pyocyanin formation. Proteose Peptone No.3 provides the essential nitrogenous nutrients, carbon, sulphur and trace elements. Glycerol serves as a C-source and Dipotassium hydrogen phosphate buffers the medium. Magnesium sulfate is necessary for the activation of fluorescein production. Agar is the solidifying agent.

Appearance:

Dehydrated medium is a free-flowing yellowish powder. The prepared medium is a kind of yellowish transparent gel.

Precautions:

This medium is for laboratory use only. Dried medium which is past shelf life, caking or color variation cannot be used.

Storage conditions and Shelf life:

King's B Medium must be stored tightly capped in the original container at 5-30 °C. The dehydrated medium has a shelf life of 5 years from date of manufacturing. Prepared medium may be stored, out of direct light at 2-8 °C.

Quality control:

Prepare the culture medium as per label directions. Inoculate and incubate at 36±1 °C for 24-48 hours.

Microorganism	Strains Number	Inoculum (CFU)	Growth	Fluorescence
<i>Pseudomonas aeruginosa</i>	ATCC9027	>10 ³	Luxuriant	+
<i>Pseudomonas aeruginosa</i>	ATCC 27853	>10 ³	Luxuriant	+
<i>Escherichia coli</i>	ATCC 25922	>10 ³	Luxuriant	-

References:

1. E.O. King, et al., Media for the demonstration of pyocyanin and fluorescein, J. Lab. Clin. Med.44, 301 (1954)
2. G.J. Bonde, Bacterial Indicators of Water Pollution, (1962)
3. G.J. Bonde, Øresunds-Vandkomiteens undersøgelser, 288 (1965-70).
4. G.J. Bonde, Medlemsblad for Den danske Dyrlægeforening, 55, 671 (1972).
5. L.C.D Formiga, New possibilities for the laboratory diagnosis of diphtheria, Brazilian J. Med. Biol. Res., 18, 401 (1985)
6. D.J. Blazevic, M.H. Köpcke, J.M. Matsen, Incidence and identification of *Pseudomonas fluorescens* and *Pseudomonas putida* in the clinical laboratory, Appl. Microbiol., 25, 107 (1973)
7. M.H. Brodsky, M.C. Nixon, Rapid method for detection of *Pseudomonas aeruginosa* on MacConkey-Agar under ultraviolet light. - Appl. Microbiol., 26, 219 (1973)
8. MacFaddin, Media for isolation-cultivation-identification-maintenance of medical bacteria, vol. 1. Williams & Wilkins, Baltimore, Md. (1985.)