

King B Medium (Pseudomonas F agar)

Medium for the identification of *Pseudomonas*. It favours the production of fluorescein

Formula in grams per liter:

Peptone Mixture
Magnesium Sulfate

20,00 | Dipotassium Phosphate
1,50 | Bacteriological Agar

1,50
14,00

Final pH: $7,0 \pm 0,2$ at 25 °C

Preparation:

Suspend 37 grams of the medium in one liter of distilled water. Add 10 ml. of glycerin. Heat with frequent agitation and boil for one minute. Dispense into appropriate containers and sterilize by autoclaving at 121°C (15 lbs.sp) for 15 minutes.

Uses:

Pseudomonas F Agar promotes fluorescein production (while pyocyanin production is inhibited) by *Pseudomonas*. Under UV stimulation fluorescein is demonstrated by a fluorescent yellow color diffused in the medium. When a greenish yellow color appears, it is due to small amounts of pyocyanin not totally suppressed. Cultures of *pseudomonas* exist which produce a pigment or fluorescein or both and, because of this situation, it is recommended to utilize both *Pseudomonas* F and *Pseudomonas* P (Pyocyanin) Agar to better identify the species.

Colonies of *Pseudomonas aeruginosa* will appear surrounded by a yellow to yellow-green zone resulting from fluorescein production.

Microbiological Tests:

Microorganisms	Growth	Colony color
<i>Pseudomonas aeruginosa</i> ATCC 9027	Satisfactory	Yellow-green
<i>Pseudomonas aeruginosa</i> ATCC 10145	Satisfactory	Yellow-green
<i>Pseudomonas aeruginosa</i> ATCC 17934	Satisfactory	-
<i>Pseudomonas aeruginosa</i> ATCC 25619	Satisfactory	Yellow-green
<i>Pseudomonas aeruginosa</i> ATCC 27853	Satisfactory	Yellow-green

