MM0291 King A agar

Use and description:

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 and incubate at 35 ± 2°C for 18 - 24 hours.

Composition per liter:

Acid casein	8.0 g
Peptone	12.0 g
Magnesium chloride	2.0 g
Agar	14.0 g
Potassium Sulphate	10.0 g

Final pH of the ready to use medium: 7.0 ± 0.2
Medium preparation: Add 46.0 grams of dehydrated culture medium and 10 g glycerol to 1 liter distilled water until evenly dispersed with stirring. Sterilised at 121°C for 15 minutes. Add selective supplement if desired to the cooled 50°C base.

Quality specification:
Dehydrated medium: homogeneous, pinkish coloured, fine powder.
Ready to use medium: yellow beige, clear agar
Microbiological response:

Organisms	Result
Pseudomonas aeruginosa ATCC 25619	good growth, blue – bluish-green
Pseudomonas aeruginosa ATCC 9027	good growth, blue
Pseudomonas aeruginosa ATCC 27853	good growth, blue

Storage: Dehydrated medium should be stored between 10 to 25°C. Once opened, place the container in a dark, dry place. The dehydrated medium should not be used if there is any lump or if the color has changed from the original.