KING B AGAR

KBMA-0EP-500

- **Principle**

King's B Medium, originally described by King et al. (1954), is a non-selective medium widely used for the isolation of pigment-producing Pseudomonas species, particularly Pseudomonas aeruginosa and other fluorescent pseudomonads. It is especially suitable for the detection and enhancement of characteristic pigment production, including the fluorescent pigment pyoverdine, which can be observed under ultraviolet light.

The medium is composed of proteose peptone as the primary source of nitrogen, amino acids and trace nutrients required for bacterial growth. Glycerol serves as an additional carbon and energy source and supports good growth while promoting pigment expression. Dipotassium hydrogen phosphate contributes buffering capacity and, together with magnesium sulphate, enhances pigment production by providing essential ions involved in metabolic pathways associated with fluorescent pigment synthesis. Agar is included as the solidifying agent.

- **Regulatory compliance**

This product is manufactured under a quality management system in accordance with ISO 9001 and ISO 13485, and its formulation and quality control comply with applicable international standards, such as ISO 11133, where relevant.

- **Composition**

Ingredients	**g/L**
Proteose Peptone	20.00
Dipotassium hydrogen phosphate	1.50
Magnesium sulphate	1.50
Agar	20.00

- **Preparation**

Dissolve 43 grams in 1,000 ml distilled water containing 15ml glycerol. Boil to dissolve the medium completely and sterilize by autoclaving at 15 lbs. pressure (121 °C) for 15 min, cool it to 42-45 °C and distribute in petri plates. Ensure complete solidification and inoculate test sample aseptically.

- **Applications and use**

Recommended for the non-selective isolation and pigment production of Pseudomonas species.

- **Quality control**

Solubility	w/o rests
Appearance	Fine powder
Colour of the dehydrated medium	Beige

Colour of the prepared medium	Light amber
Final pH (25 °C)	7.2 ± 0.2

- **Microbiological test**

Cultural characteristics observed after incubation at 33-37 °C for 18-24 hours. Inoculum 50-100 CFU.

Microorganism	ATCC	Growth	Recovery	Pigment production
Pseudomonas aeruginosa	27853	Luxuriant	≥ 70%	Greenish yellow
Pseudomonas aeruginosa	10145	Luxuriant	≥ 70%	Greenish yellow

- **Storage**

The product is highly hygroscopic; keep the container always closed and store it properly as per the conditions mentioned on the label. The declared expiry is valid only when stored as per the conditions mentioned on the label. Temp. Min.:2 °C Temp. Max.:25 °C.

Note: Sterilize media immediately after reconstitution.

- **Bibliography**

Baird R.B., Eaton A.D., and Rice E.W., (Eds.), (2015), Standard Methods for the Examination of Water and Wastewater,23rd Ed., APHA, Washington, D.C.

Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11thEdition. Vol. .1

King, E. O., M. K. Ward, and E. E. Raney. (1954). Two simple media for the demonstration of pyocyanin and fluorescein. J. Lab.Clin. Med. 44:301.

- **Product use limitation**

This product is developed, designed and supplied exclusively for research use only. It is not intended for diagnostic applications or drug development, and it is not suitable for administration to humans or animals.