

## 90925 *Klebsiella ChromoSelect* Selective Agar Base

*Klebsiella ChromoSelect* Selective Agar for selective isolation and easy detection of *Klebsiella* species from water and other sources. This medium can also be used in membrane filtration procedure.

Composition:

Ingredients	Grams/Litre
Peptone, special	12.0
Yeast extract	7.0
Sodium chloride	5.0
Bile salts mixture	1.5
Chromogenic mixture	0.2
Sodium lauryl sulfate	0.1
Agar	15.0
Final pH 7.1 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Appearance: Faintly beige to yellow coloured, homogeneous, free flowing powder.

Gelling: Firm

Color and Clarity: Light amber coloured, clear to slightly opalescent gel forms in petri plates.

Directions:

Suspend 20.4 g in 500 ml distilled water. Heat to boiling to dissolve the medium completely. DO NOT AUTOCLAVE. Cool to 45-50°C and aseptically add the rehydrated contents of 1 vial of *Klebsiella* Selective Supplement (Cat. No. 15821). Mix well and pour into sterile petri plates.

Principle and Interpretation:

*Klebsiella ChromoSelect* Selective Agar is recommended for isolation and enumeration of *Klebsiella* species based on chromogenic differentiation. *Klebsiella pneumoniae* strains are distributed widely in the environment and contribute to biochemical and geochemical process (1). *Kleb. pneumoniae* causes severe often fatal pneumonia. It also proves to be the source of lung infections that generally occur in patients with debilitating conditions such as alcoholism, diabetes mellitus, and chronic obstructive pulmonary disease (2). The chromogenic substrate incorporated in the media is cleaved specifically by *Klebsiella* species to produce purple-magenta coloured colonies. *Klebsiella pneumoniae* the causative agent of pneumonia produces a purple-magenta coloured colony thereby aiding in the easy detection of the organisms. Most of the frequently encountered gram negative faecal contaminants are inhibited in this media using a selective supplement. Peptone special and yeast extract provide the essential nutrients required for the growth of the organism. Sodium chloride maintains the osmotic equilibrium of the medium. Bile salts mixture and sodium lauryl sulfate inhibit most of the accompanying flora. Addition of the selective supplement further increases the selectivity of the medium.



Cultural characteristics after 24 hours at 37°C.

Organisms (ATCC)	Growth	Color of Colony
<i>Escherichia coli</i> (25922)	-	-
<i>Enterobacter aerogenes</i> (13048)	-	-
<i>Klebsiella pneumoniae</i> (13883)	+++	purple-magenta (mucoid)
<i>Serratia marcescens</i> (8100)	-	-
<i>Salmonella serotype Typhi</i> (6539)	-	-

References:

1. N.R. Krieg, J.G. Holt (ed.). *Bergey's Manual of systematic Bacteriology*, vol. 1, p. 408-516. The Williams and Wilkins Co., Baltimore, Md. (1984)
2. H.Y. Reynolds, Pneumonia due to *Klebsiella* (Friedlander's pneumonia), J.B. In Wyngaarden, L.H. Smith (eds): *Cecil Text book of Medicine*, 16th ed, pp 1430, 1432. Philadelphia, W.B. Saunders (1982)

**Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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