

TM 1633-CHROMOGENIC KLEBSIELLA SELECTIVE AGAR BASE

INTENDED USE

For selective isolation of *Klebsiella* species from water and other resources. The medium can also be used in membrane filter technique.

PRODUCT SUMMARY AND EXPLANATION

Chromogenic Klebsiella Selective Agar Base is recommended for selective isolation and enumeration of *Klebsiella* species from water using chromogenic reaction. *Klebsiella pneumoniae* is a causative agent of fatal pneumonia. It is also the source of lung infections that generally occur in patients with debilitating conditions such as alcoholism, diabetes mellitus, and chronic obstructive pulmonary disease etc. The incorporation of chromogenic mixture along with selective supplement aids in easy detection of the organism.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Peptone, special	12.000
Yeast Extract	7.000
Sodium chloride	5.000
Bile salts mixture	1.500
Chromogenic mixture	0.200
Sodium lauryl sulphate	0.100

PRINCIPLE

Peptone, special and Yeast extract provide nitrogen, vitamins and minerals. Sodium chloride maintains the osmotic balance of the medium. Agar is a solidifying agent. Selective isolation and detection of *Klebsiella pneumoniae* is achieved with use of chromogenic substrate which is specifically cleaved by the organism to produce purple-magenta coloured colonies. Bile salt mixture and Sodium lauryl Sulphate makes the media selective by inhibiting most of the microorganisms. Addition of the klebsiella selective supplement (TS 204) further increases the selectivity of the medium.

INSTRUCTION FOR USE

- Suspend 40.80 grams in 1000 ml distilled water.
- Warm gently to dissolve the medium completely. Do not autoclave the media.
- Cool at 40 50ºC.
- Aseptically add contents of 2 vials of Chromogenic Klebsiella Selective Supplement (TS 204) rehydrated in 5ml distilled water.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of powder	:	Cream to yellow homogeneous free flowing powder
Appearance of prepared medium	:	Light amber coloured, clear to slightly opalescent gel
pH (at 25°C)	:	7.1±0.2

INTERPRETATION

Cultural characteristics observed after incubation with addition of Chromogenic Klebsiella Selective Supplement (TS 204). Recovery rate is considered 100% for bacteria growth on Soya Agar.

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PRODUCT DATA SHEET



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Colour of colony	Recovery	Incubation Temp.	Incubation Period
Klebsiella pneumoniae	13883	50-100	Luxuriant	Purple magenta, mucoid	>=50%	35-37°C	18-24 Hours
Enterobacter aerogenes	13048	≥1000	Inhibited	-	0%	35-37°C	18-24 Hours
Escherichia coli	25922	≥1000	Inhibited	-	0%	35-37°C	18-24 Hours
Salmonella typhi	6539	≥1000	Inhibited	-	0%	35-37°C	18-24 Hours

PACKAGING:

In pack size of 100gm & 500gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if powder show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

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).



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. ***For Lab Use Only**

Revision: 25 February,

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