

TM 1092 - STREPTOMYCES AGAR

INTENDED USE

For cultivation and maintenance of Streptomyces.

PRODUCT SUMMARY AND EXPLANATION

Streptomycetes i.e. aerobic Actinomycetes usually inhabit soil. In humans, the infections are limited to actinomycotic mycetoma. Streptomyces Agar is used for the cultivation and maintenance of *Streptomyces*.

COMPOSITION

Ingredients	Gms / Ltr
Malt extract	10.000
Yeast extract	4.000
Dextrose	4.000
Calcium carbonate	2.000
Agar	12.000

PRINCIPLE

Malt extract provides acidic environment and nutrients required for metabolism. Yeast extract, dextrose provides essential nutrients for the growth of *Actinomycetes*. Calcium carbonate is the source of essential cations for growth. Though many carbon sources have been used for the growth of *S. kanamycetus*, glucose (dextrose) is found to be the most suitable carbon source for the production of an antibiotic from *S. kanamyceticus*.

INSTRUCTION FOR USE

- Dissolve 32.00 grams in 1000 ml distilled water.
- Heat just to boiling.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and dispense as desired.

Note: Due to presence of calcium carbonate, the prepared medium forms opalescent solution with white precipitate.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium : Yellow coloured opalescent gel forms in Petri plates.

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Streptomyces kanamyceticus</i>	12853	50-100	Luxuriant	>=70%	25-30°C	5 days



PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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.

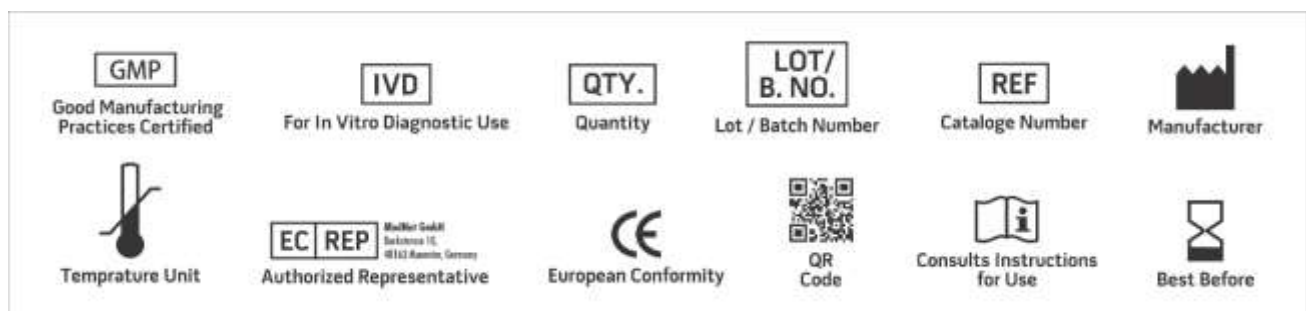
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Atlas R. M., 1993, Handbook of Microbiological Media, Parks, L.C., (Ed.), CRC Press, Boca Raton.
2. Rodney A., Shukla A. and Mujumdar, African Journal of Biotechnology Vol. 4 (9), 909-910, 2005.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**
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